EVIDENTIARY HEARING

BEFORE THE

CALIFORNIA ENERGY RESOURCES CONSERVATION

AND DEVELOPMENT COMMISSION

In the Matter of:	)	
	)	
Application for Certification	)	Docket No.
for the Salton Sea Unit 6	)	02-AFC-2
Geothermal Project	)	
	)	

IMPERIAL IRRIGATION DISTRICT

BOARD ROOM

1285 BROADWAY STREET

EL CENTRO, CALIFORNIA

MONDAY, OCTOBER 27, 2003

2:05 P.M.

Reported by:
James Ramos
Contract No. 170-01-001

COMMITTEE MEMBERS PRESENT

William J. Keese, Presiding Member

Robert Pernell, Associate Member

HEARING OFFICER, ADVISORS

Garret Shean, Hearing Officer

Scott Tomashefsky, Advisor

E.V. (Al) Garcia, Advisor

STAFF PRESENT

Paul A. Kramer, Staff Counsel

Robert Worl, Project Manager

Natasha Nelson

William Walters

Ramesh Sundares Waran

PUBLIC ADVISER

Margret Kim

APPLICANT

Michael J. Carroll, Attorney
Latham and Watkins

Bernard Raemy, Project Development Manager
CalENERGY Operating Corporation

Paul E. Neil
RTP Environmental Associates, Inc.

Jerry P. Salamy
CH2M HILL

EJ Koford
Integrated Engineers and Contractors Corporation

INTERVENORS

Tanya A. Gulesserian, Attorney
Adams, Broadwell, Joseph and Cardozo
California Unions for Reliable Energy

ALSO PRESENT

Carol Roberts
U.S. Fish and Wildlife Service

Jim Kelley
Imperial Irrigation District

Gary Wyatt

Aida C. Gates, District Representative
Senator Denise Moreno Ducheny

Glenna Barrett, Field Representative
Assemblywoman Bonnie Garcia

Tom Lemmon
International Association of Heat and Frost
Insulators and Asbestos Workers

Ayron M. Schoneman
The Coalition of Labor, Agriculture and Business
COLAB

Sam Couchman
Imperial County Office of Employment Training

Anne Mallory, Assistant Superintendent
Imperial County Office of Education

Robertta J. Burns
Imperial County Executive Officer

Eddie A. Lutz
Imperial Irrigation District

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P R O C E E D I N G S

2:05 p.m.

PRESIDING MEMBER KEESE: Good afternoon. We'll call to order the hearing on the Salton Sea Geothermal project. And we'll start with introductions. I'm Bill Keese, Chair of this Committee; and Robert Pernell, to my left, is the other member of our Committee.

COMMISSIONER PERNELL: Good afternoon.

PRESIDING MEMBER KEESE: Al Garcia, to his left, is his Advisor on the project. And Scott Tomashefsky is mine. Mr. Shean will be handling the proceeding.

At this time I'd like the applicant to identify themselves and our principal witnesses.

MR. CARROLL: Thank you. Mike Carroll with Latham and Watkins on behalf of the applicant. On my right is Bernard Raemy, the Project Manager for the applicant. And to his right is Paul Neil who is our air quality witness today.

UNIDENTIFIED SPEAKER: Good afternoon.

PRESIDING MEMBER KEESE: Staff.

MR. KRAMER: Good afternoon; I'm Paul Kramer, staff counsel. With me is Bob Worl, the

Project Manager. We have Will Walters and Natasha Nelson, two of our principal witnesses.

PRESIDING MEMBER KEESE: Thank you. Intervenors? Do we have any -- yes, identify --

MS. GULESSERIAN: Tanya Gulesserian with CURE on the telephone.

PRESIDING MEMBER KEESE: Thank you. Any other intervenor present in person or by phone? Do we have any representatives of government, local agencies? For the record would you please come forward and identify yourself.

MR. KELLEY: I'm Jim Kelley with the Imperial Irrigation District. We are a government agency. We are, as part and parcel of this project. But I just wanted to have you recognize the District is here.

PRESIDING MEMBER KEESE: Thank you. We just like to set the tone for whoever else is in the audience to know who is here. And, if it's appropriate later to speak, feel free.

MR. KELLEY: Okay, thank you.

PRESIDING MEMBER KEESE: And that applies to everybody in the audience.

Any other representatives of governmental agencies?

MS. ROBERTS: Carol Roberts, U.S. Fish and Wildlife Service participating by phone.

PRESIDING MEMBER KEESE: Thank you. All right, with that we will hand this over to Mr. Shean.

HEARING OFFICER SHEAN: Good afternoon. What we have done in our notice of the evidentiary hearing was to give an order of testimony. And while we are not on the exact mark for the times, we're going to follow it, nonetheless, which will also give us a period for public comment.

Let me just indicate to the Commission's Public Adviser could not be here due to the fire and other things. There are a lot of travel constraints. And I understand we have such things for one of the applicant's witnesses, as well. So we'll work with that as best we can.

So if there are any members of the public who would like to speak, ordinarily we'd have little blue cards for you, but since she's not here and she's the keeper of the little blue cards, we don't have them. But we'll give you an opportunity to come up and speak, probably at two different points in the meeting.

What we propose to do initially is to

take from the applicant and then the staff essentially all the uncontested items. And those can be found both in the applicant's application for certification and data responses. And the applicant has handed us now another addendum indicating the various materials it wants put into the record.

The purpose for this is we had basically the bulk of the proceedings here had been uncontested after numerous workshops between the applicant and staff and others who are here in the local area, including the CURE representative from northern California.

We do have two areas where we will be taking testimony; that is on air quality and public health, as a collective topic, and on biology. And we will get to those very shortly. So what we think we'll do initially is run through these uncontested areas; go the applicant first for its declarations in support of the AFC and data responses, et cetera.

Mr. Carroll.

MR. CARROLL: On October 17th applicant filed a series of declarations on all of the uncontested areas. We have distributed today for

review a supplemental two-page declaration from Bernard Raemy. The sole purpose of that supplemental declaration is to identify some additional exhibits in the uncontested areas that Mr. Raemy is sponsoring that were inadvertently omitted from his prepared testimony filed on October 17th.

We do not have any changes to make to the declarations that were filed on October 17th. So we would move admission of the October 17th filings and the supplemental declaration of Mr. Raemy that was presented today.

HEARING OFFICER SHEAN: All right, is there objection to the admission of the applicant's filing of October 17th and today's filing of Mr. Raemy's material?

MR. KRAMER: No.

HEARING OFFICER SHEAN: Hearing none, those two are admitted into the evidence of the proceeding and the record for the basis for the Commission's decision.

And that, I think, is that portion from the applicant, right?

MR. CARROLL: Yes.

HEARING OFFICER SHEAN: All right. The

comparable staff material is from parts one, part two and the addendum of the staff's final assessment. And we'll go to the staff now.

MR. KRAMER: We would introduce those three documents along with the responses to the Committee questions that we filed on Friday.

HEARING OFFICER SHEAN: All right. Is there objection to admission of those into the evidentiary record of the proceeding?

MR. CARROLL: No.

HEARING OFFICER SHEAN: Hearing none, they are admitted.

We also have the final determination of compliance by the local Air District, which on the basis of a discussion at the prehearing conference was to be admitted into the record by stipulation. Is that the position of the applicant and the staff?

MR. CARROLL: Yes.

MR. KRAMER: I'd just note that after the FDOC was released, there was a one-page letter, it's dated October 7, 2003, from Harry Dillon, that made some minor amendments to AQ1 and AQ28. That should be a part of the FDOC.

HEARING OFFICER SHEAN: All right,

incorporating that October letter from the District, is there objection to taking the FDOC by stipulation?

MR. CARROLL: Not from applicant.

MR. KRAMER: No.

HEARING OFFICER SHEAN: All right. They are admitted to the record.

The next thing we have the testimony that relates to air quality and public health; we have two areas of contest between the applicant and the staff related to the operating ammonia emissions and the commissioning hydrogen sulfide emissions.

And with that we'll go initially to the staff for the introduction of your witnesses and their testimony.

MR. KRAMER: Okay, we need to have Mr. Walters and Mr. -- I'm sorry, Ramesh, I'm having trouble with your last name.

MR. SUNDARES WARAN: Sundares Waran.

MR. KRAMER: -- Sundares Waran sworn. Mr. Sundares Waran is on the telephone.

HEARING OFFICER SHEAN: All right. We'll have the reporter do that.

THE REPORTER: Can you hear me on the

phone?

MR. SUNDARES WARAN: Yes.

MS. ROBERTS: Yes.

Whereupon,

WILLIAM WALTERS and RAMESH SUNDARES WARAN and CAROL ROBERTS

were called as witnesses herein, and after first having been duly sworn, were examined and testified as follows:

MR. KRAMER: I gather that was Carol Roberts who was also sworn.

DIRECT EXAMINATION

BY MR. KRAMER:

Q Okay, Mr. Walters, could you briefly summarize the aspects of your testimony for the public -- and that's the aspects other than the ammonia and the H2S issues, just in a couple minutes?

MR. WALTERS: Certainly. Staff first identified the setting of the project and identified the current air quality situation, the nonattainment for ozone and nonattainment for PM10 and attainment for other pollutants in the area of the project.

We analyzed the project emissions and

the modeling that was done for the project. We identified some issues with the H2S, emissions for both certain temporary operations and initial commissioning.

The applicant made some modifications to their design and some modifications to some operating procedures, flow rates, that brought most of the emissions and modeled impacts to below what we considered significant.

We also dealt with some issues in terms of construction requirements with the applicant and came to agreement on construction conditions to deal with the potential for significant impacts for construction.

The other issue that we were dealing with is the ammonia emissions, potential for significant impact due to over 2750 tons per year of ammonia emissions from the project, over eight tons a day of ammonia emissions that could result in additional secondary PM10 formation.

In coming up with all of these the staff came up with a number of our own conditions of certification to deal with construction issues, to deal with the ammonia issues, as well.

We worked with the District to come up

with conditions to deal with the ammonia -- well, actually for the H2S emissions, and to deal with the primary criteria pollutants.

The emission reduction credits, we have agreement that the emission reduction credits for the criteria pollutants, H2S and PM10 are appropriate for operating emissions for the facility.

And so essentially our finding for the project was that we had what we considered two unmitigated significant impacts. One was for initial commissioning. While we cannot find a reasonable control method to control the H2S emissions during all the operations of initial commissioning, and our modeling results are showing impacts that are higher than the California ambient air quality standard in specific locations near the project site, during those initial commissioning operations.

And the other significant impact we're finding is, again, in fact we haven't been able to find a reasonable way of mitigating the ammonia emissions at this point from the project, and we believe that the additional potential for PM10, secondary PM10 formation is significant. And

therefore we have added conditions to potentially require mitigation in the future if such mitigation, whether it's supplanting the water that's currently being used in the cooling tower, which is the primary source of the ammonia; or if there's a control technology that we consider to be cost effective becomes available in the future. We've added that as a condition.

MR. KRAMER: Now, let's talk about those two issues separately. First, ammonia. Does the Air District regulate ammonia as an emission from this project?

MR. WALTERS: No, not specifically. Ammonia is not provided for in the regulations.

MR. KRAMER: And so they had no conditions as far as ammonia goes?

MR. WALTERS: None that I can think of specifically. They may have noted the emissions of ammonia, but there were no requirements of specific mitigation required under their conditions.

MR. KRAMER: Okay, so then staff's concerns were arising out of its CEQA analysis, is that right?

MR. WALTERS: That's correct.

MR. KRAMER: And how does ammonia lead to the formation of PM, let's in very simple terms, what specific reaction we're talking about.

MR. WALTERS: Well, essentially ammonia will react with a number of things. Primarily with nitrate essentially from NOx, which is converted to nitric acid, which then reacts to create ammonia nitrate. It also reacts with SO2 which is converted to sulfuric acid, which then reacts with the ammonia to create ammonium sulfate

There's some other things it can react with, but those are the two major ones.

MR. KRAMER: And is that reaction just a one-way reaction, or does it sometimes reverse itself?

MR. WALTERS: Actually both are reversible. In particular ammonium nitrate is noted to be reversible and at higher temperatures you get less formation; at lower temperatures you can get more formation due to the reaction mechanics.

So, essentially as the temperature rises that particulate will actually go back in the other direction; and as it cools you'll actually get more formation in the same air body.

MR. KRAMER: So it may change its state several times going to particulate back to the individual constituents, components, and then recombining again at some other point?

MR. WALTERS: Right. The equilibrium will keep changing as the atmospheric conditions change.

MR. KRAMER: Okay. What does the term ammonia rich mean?

MR. WALTERS: Ammonia rich, generally the terminology is meant to say there is more than enough ammonia to react with all of the available nitric acid and sulfuric acid in the atmosphere to create secondary particulate.

MR. KRAMER: Does that mean that the reaction is complete and there's no more ammonia nitrate, or other component available for reaction?

MR. WALTERS: Not necessarily. It depends again on the conditions. For example, if the conditions aren't all that favorable for forming ammonium nitrate you don't get complete conversion. And additional ammonia will actually help push the reaction a little bit further than it is at the current time.

So, for example, in looking at the exhaust that we have from the cooling towers, the exhaust is a moist exhaust with a high level of ammonia which then is essentially mixed with the ambient air that comes through the cooling tower, which has whatever is the current ambient levels of NOx and SOx, which then, since it is more humid, will tend to react more into sulfuric acid and nitric acid, which then since there is such a high amount of ammonia, can react further.

But even if it weren't to react more, the fact is there's still going to be a little bit of nitric acid, sulfuric acid that is unreacted because their reaction doesn't proceed all the way at say a warmer, lower relative humidity condition.

And so additional ammonia will help push the reaction a little bit further. That actually can be illustrated in one of the documents that was used in actually the applicant's testimony. And I don't know if you want to go over those figures.

MR. KRAMER: Yeah, we'll get to that in a moment. Now, the applicant has said that because the area is ammonia rich they don't expect

to have the emission of more ammonia by this project to lead to any increase in particulate formation, correct?

MR. WALTERS: Yes, yes, they have.

MR. KRAMER: And do you agree with that position of theirs?

MR. WALTERS: No, I don't. For a couple of reasons. Number one, I'm not sure that there's really any proof that the area is consistently and always ammonia rich. There really isn't any actual data from this particular air basin to substantiate that.

It may be ammonia rich at times, and then it may not at other times, depending on where the air is coming from, for example. If the transport is mainly coming from the South Coast air basin, you know, you can make an argument that the air is probably, at least the incoming air would not be ammonia rich.

MR. KRAMER: Is it possible for air to transport from the South Coast?

MR. WALTERS: Certainly. The South Coast has been looked at for causing problems as far away as (inaudible) Canyon.

The second part of my argument --

MR. KRAMER: Okay.

MR. WALTERS: -- is the fact that what we have is a reversible reaction, and to assume that a reversible reaction always goes over into completion isn't exactly correct. Chemical, essentially it's going to go to a certain level or certain point to reach equilibria, but as you add more of the reactants you tend to push the reaction.

You kind of think of it as there's pressure on either side of the equation for reversible reaction. The pressure on this side being particulate, it wants to go back into the gaseous phase. Pressure on this side being the reactants, the acid gases and the ammonia that want to go to particulate.

And as you add more ammonia on this side you create pressure which creates more particulate. The exact amounts of that, you know, are the --, because exact equilibria constants under all the different conditions aren't known. But there will be, in my view, some additional secondary particulate formed, particularly under winter conditions or likely under winter conditions here.

MR. KRAMER: So, are you saying that even if the area is ammonia rich, that you would expect additional ammonia emitted from this project to result in additional particulate formation?

MR. WALTERS: Yes, I would.

MR. KRAMER: And the staff assessment didn't predict a particular amount of ammonia that would result, correct?

MR. WALTERS: That's correct.

MR. KRAMER: Was that an inadvertent omission or were you unable to come to a particular estimate?

MR. WALTERS: We really weren't able to come to a particulate estimate because of the reaction mechanism and equilibrium constant is affected by so many different variables, relative humidity, temperature that the exact amount just isn't known. The various equilibrium constants, number one, aren't available, so we really can't do that kind of calculation.

But we can make an assessment that there will be some additional. The exact amount, whether it's 1 percent of the ammonia will convert, or 10 percent, we can't really say.

MR. KRAMER: If 1 percent converted what would be the amount of particulate matter that would result?

MR. WALTERS: -- my testimony, which I don't have right on the tip of my tongue, but I think it's a little over 100 tons.

MR. KRAMER: Okay. And is this area in attainment for particulate matter?

MR. WALTERS: No, the area is right now designated as moderate nonattainment. And there's a court ruling now that may force it into serious nonattainment. The Ninth Circuit just made a finding that they believe that the area should be redesignated and is essentially telling EPA to do that.

I don't know if that's going to be the final decision on the matter, but that's the current last legal challenge on the issue.

COMMISSIONER PERNELL: Excuse me. Are you talking about the entire South Coast? What area are you talking about?

MR. WALTERS: I'm talking about the Imperial County --

COMMISSIONER PERNELL: Just Imperial County?

MR. WALTERS: Imperial County, yeah.

MR. KRAMER: We have copies of that decision. The case is Sierra Club v. The United States Environmental Protection Agency. The decision was filed October 9th of 2003.

So then the Air District, without this project it has more particulate in the air than it should by the federal standard, correct?

MR. WALTERS: That's correct.

MR. KRAMER: And then this would just add to that, make it worse?

MR. WALTERS: Right. That's our finding, that it would make it worse. Maybe not an every day or every hour, but at times when it's cool and moist we would expect that more particulate would be formed.

MR. KRAMER: The applicant referred to a study that was regarding the area around Denver, Colorado, correct?

MR. WALTERS: That's correct.

MR. KRAMER: Is that the study you mentioned a minute ago?

MR. WALTERS: Yes, it is.

MR. KRAMER: Okay. They cited that study for the proposition that there would be no

additional particulate created.

MR. WALTERS: Right. And I believe the study even says that. But you have to take it in reference to what the study --

MR. KRAMER: Let me stop you for a minute and pass out the -- this is a copy of a portion of that study.

COMMISSIONER PERNELL: Mr. Kramer, are you going to pass out the Ninth Circuit decision, also?

MR. KRAMER: In fact, Bob, why don't you come back and we can do that now, too.

(Pause.)

MR. KRAMER: Do we need to number these documents, these exhibits?

HEARING OFFICER SHEAN: No, just identify them by their title.

MR. KRAMER: Okay. The study -- I've already identified the court case. The study is called, Northern Front Range Air Quality Study Final Report, dated June 30, 1998. The document is, I think, 400 pages. I could email anybody a PDF file if they really wanted to see it all. But we have just reproduced section 8 entitled, Ammonium nitrate equilibrium.

And, Mr. Walters, did you find in this study support for the proposition that netting ammonia from the emissions from this plant would cause additional particulate, or would not cause it, as the applicant suggests?

MR. WALTERS: Yes. Actually there are three figures in the study which show what happens when you change the amount of ammonia at different temperatures and relative humidities.

Those figures are figure 8.2-2, 8.2-3, and 8.2-4. Now what these --

MR. KRAMER: What pages are those on?

MR. WALTERS: Those are on pages 8-7 through 8-9.

MR. KRAMER: Would you try to explain for us what these graphs in front of us, what they mean?

MR. WALTERS: What they're basically showing is the amount of particulate nitrate that would essentially convert, the fraction that would convert at different temperatures based on the different molar ratio of ammonia to I believe it's nitric acid. But essentially it relates to how much ammonia is in the air.

And, as you can see, and I don't know

which one everybody's looking at, but if we look at figure 8.2-2 the first one, which is for 80 percent relative humidity, you can see when you have much more ammonia, when the ratio is very high, you get formation that occurs at warmer temperatures and at any given temperature there's considerably more fraction formed than at lower temperatures.

That would happen for, say we only have 50 percent available ammonia, so basically an area that would not be ammonia rich, or even one that's at two-to-one versus ten-to-one, you can see there's a considerable amount of additional nitrate formed at the same given condition.

Essentially all you need to do is take a look, for example, if you look at the 20 degree centigrade line, you can look as each of the subsequent parts from the figures go up you cross each of these different curves. And each of these different curves start from the .5 to the 1 ratio, meaning that's an ammonia lean. So you're not getting a lot of conversion; it's a very low conversion at 20 degrees.

But as you go higher and higher when you have more and more ammonia, well above, you

know, -- considered ammonia rich. Ammonia rich is just above one-to-one. The amount of formation goes up dramatically until your formation is almost 90 percent at a ten-to-one ratio.

So, essentially it's this figure that indicates that when you're in a non-ideal -- when I say non-ideal, I think I need to go back and kind of give you some background to what this study did in the first place.

The study was specifically for events that were occurring in the winter in Denver. Very cold temperatures. The temperatures, ground-level temperatures during this study were in the range of -12 to -25 degrees Centigrade. Obviously nothing we would see here.

Under those temperatures you can see, if you take a look at any of the charts, as the temperature gets very cold and you're at a one-to-one or better, the lines all -- the curves all tend to converge. There's not a lot of differentiation in the amount of particulate that will be formed.

But when you get in conditions where it's warmer than -12 or even, in fact, zero, you can see that the amount of ammonia does play a

role in how much conversion will actually occur.

MR. KRAMER: More ammonia gives you more particulate?

MR. WALTERS: Right. Because essentially what's not happening is you don't get a complete reaction at the higher temperatures and at the lower relative humidities. But whereas at the really low temperatures of this particular study they were saying essentially almost a complete conversion.

And so their study indicated that additional ammonia would not create additional nitrate. Unfortunately those are not the same conditions we're going to see here.

MR. KRAMER: 40 degrees Celsius, that's about 104 Fahrenheit, is that correct?

MR. WALTERS: Yes, that's correct.

MR. KRAMER: And that's closer to the summertime temperatures here?

MR. WALTERS: Right.

MR. KRAMER: Okay. Did you look at any other studies in forming your conclusions?

MR. WALTERS: Well, I found some other studies that essentially use the same methodology as this study, which is if you look on page 1 it

identifies the simulating composition of atmospheric particles at equilibrium scape method.

There is another study that was done for the southeastern U.S., where --

MR. KRAMER: Let me show you a document. Is this that study? It's entitled, Effects of Changes in Sulfate Ammonia and Nitric Acid on Particulate Nitrate Concentrations in the Southeastern United States.

MR. WALTERS: Yes, that's correct.

MR. KRAMER: Okay, the author is Charles Blanchard and George Hidy.

MR. WALTERS: Right.

MR. KRAMER: I think we have -- we have fewer copies of this, but I think there's enough for each member of the panel. And Mr. Carroll already received one earlier.

What did this study contribute to your opinion?

MR. WALTERS: Well, using the general same methodology as the Denver study, this study indicated that additional ammonia would create additional particulate. I believe the area was generally considered not to be ammonia rich, which may or may not be the case in this particular air

basin.

But it shows the fact that there is a differentiation in terms of, you know, these different studies and what their conclusions are. The most important part, I think, of any of these studies is the fact that none of them are for Imperial County. So while we can try to point to a study and its conclusions, I think we need to look at the basis for the conclusions more than the fact that, oh, in Denver they said additional ammonia wouldn't create a problem. Or in a different place they say, well, additional ammonia won't create another problem.

Because you have to take the context of each of the studies first to figure out well, what was that study trying to do.

In Denver that study was trying to figure out what was happening during extreme events in the winter, events that are not similar to anything that will occur here.

In southeastern U.S. the study may indicate an increase that is related more to an area that's less ammonia rich than this basin may be or may not be. Again, we don't really know for sure because we don't have a good enough sampling

basis to determine whether or not this area is truly ammonia rich.

MR. KRAMER: In determining the particulate -- let me start over. In your examination of the conversion of ammonia is it appropriate to use annual averages, some of the factors like temperature or moisture, in making your determination?

MR. WALTERS: No, because the reaction, you know, is continuous; and it's occurring with whatever the current conditions are. So, trying to figure out what the conditions are, really, over time and how they'll affect at any particular time is important.

We're dealing with standards that aren't -- well, PM10 standard, there is an annual standard, but we're also dealing with a 24-hour standard for both PM10 and the new PM2.5 standards that are coming online.

So we have to deal with both shorter term standards as well as the annual standard. But even an annual average, it doesn't make sense either for determining whether or not an area is ammonia rich or for determining whether or not an area is going to have any reaction. Because it

really depends on what are the conditions at the exact time on that particular day.

And it's our contention that there will be days when the conditions are going to be favorable for the additional ammonia from this plant to create additional secondary particulate, secondary fine particulate.

MR. KRAMER: Could you briefly -- you've touched on your condition AQC13 already -- could you explain again what the goal of that condition is?

MR. WALTERS: The goal of the condition is to try to mitigate the ammonia emissions from this plant if it becomes cost effective. And that can be done either through the substitution of the condensate that's used in the cooling towers, which are the source of the ammonia; or through the addition of a control technology, again if it's considered cost effective.

Our cost determination was fairly favorable. It's $500 a ton, which if we were to relate that to say what South Coast requires for PM10 through its priority reserve, would be something like one-three-hundredth or something, one two-hundred-and-fiftieth of the cost.

MR. KRAMER: So South Coast costs would be roughly what? Per ton?

MR. WALTERS: I believe it's on the order of 132-thousand.

MR. KRAMER: Okay, so your condition says if the cost gets to $500 or below a ton, with some measure that's not currently available today, then they need to impose it?

MR. WALTERS: Correct.

MR. KRAMER: -- to carry it out?

MR. WALTERS: Correct. And the condition requires them to essentially assess technology and water supply sources first two years after initial commissioning, which would be about four to five years from now. Then every five years after that.

MR. KRAMER: Okay, let's turn to H2S. Could you briefly -- I gather the applicant submitted some modeling with their application for certification and you reviewed that, correct?

MR. WALTERS: Yes, I did.

MR. KRAMER: Did you base your conclusions solely on their modeling, or did you conduct some modeling of your own?

MR. WALTERS: I conducted some modeling

of my own to go along with their modeling analysis. What I did is I went a little bit further than what they did with their modeling.

Essentially they modeled, I believe it was five different scenarios from the initial commissioning. There are a number of different scenarios. I actually modeled all the different scenarios up to the point where emissions become the same as regular operating emissions.

And took a look at a frequency or likelihood, based on the fact it's only a 14-day event, with those modeled impacts from each of the different ones. And also identifying the length of each of those activities, whether it's an 18-hour activity, whether it's a 24-hour activity, six-hour activity, what the frequency of each of those activities would be. The likelihood of actually having what we consider a significant impact which would be an exceedance of the California ambient air quality standard.

And in doing that we were able to generally identify the fact it was less than 50 percent for most areas there would be that kind of high level of H2S emissions, not that it wouldn't happen, but the likelihood would be low.

However, we still found that at Obsidian Butte and up in the elevated areas of Rock Hill, which are in the Sonny Bono Wildlife Refuge, that we still did expect, even on average, just using average met conditions, that there would be exceedances that would occur during the initial commissioning.

MR. KRAMER: And Obsidian Butte is not generally visited by the public, right?

MR. WALTERS: That's my understanding.

MR. KRAMER: But Rock Hill is?

MR. WALTERS: Yeah, I believe that I've seen numbers something like 10,000 people a year at least go up to the top of Rock Hill.

MR. KRAMER: Tourists and casual visitors?

MR. WALTERS: Bird watchers, et cetera, yeah.

MR. KRAMER: Can you explain the ambient air quality standard and what it's based upon?

MR. WALTERS: The California ambient air quality standard is a one-hour standard for H2S. It's general basis was based on odor impact. And, in fact, it is related to the mean odor threshold, meaning that 50 percent, essentially 50 percent of

the people would be able to smell that level, which is 42 mcg/cubic meter.

The lower odor threshold is more like 7 to 10 mcg/cubic meter. And --

MR. KRAMER: In other words this would exceed both?

MR. WALTERS: This would exceed both. Also we've identified the fact that at levels that are this high there is the likelihood for some minor health effects, headache, nausea, et cetera, can happen in sensitive individuals.

MR. KRAMER: So it's more than just wrinkling your nose and saying that doesn't smell so good?

MR. WALTERS: Yeah, it can be for particular individuals, yes.

MR. KRAMER: The applicant has suggested that the offsets they're creating at some of their other facilities would mitigate this impact that you found for commissioning H2S. Did you agree with that position of theirs?

MR. WALTERS: No, because the offsets, while they create maybe an overall net balance, they don't affect the actual impacts that occur at any given location at a given time.

So when we're looking at a specific criteria, particularly one that can be determined as a health-based criteria, you know, when looking at enough data, as well as an odor nuisance criteria, the fact that they are lowering emissions over at Leathers won't necessarily affect Rock Hill at the time which the wind is blowing from SSU6 to Rock Hill.

Because number one, it's not in the same -- it's not lined up in the same direction, so it's not going to cause any reduction over at Rock Hill. And the same can be said for any other, just about any other impact point unless it's lined up essentially with Leathers.

MR. KRAMER: So on a basin-wide basis there might be some balancing going on, but at a specific location it won't necessarily reduce the odor that somebody perceives?

MR. WALTERS: Right, at a specific location it won't reduce it. Also, the emissions that -- emission reductions, while on a ton basis, look very favorable to the commissioning, the commissioning is only a 14-day event.

So when you take a look at the maximum emissions that occur during commissioning the

offsets on a pound-per-hour basis are nowhere near as high from the reduction from Leathers as they will be from the emissions that will occur from the initial commissioning.

So there's no balance when you take a look at the short term. In fact, we're dealing with the short-term standard, so that's why we don't consider them to balance out. That's at least one of many reasons why we don't consider it to balance out the situation.

MR. KRAMER: Okay, so even if there wasn't this problem of the wind not blowing them both at the same point, are you saying the amount of offsets at Leathers or the other facilities would not be enough in quantity to offset the commissioning emissions?

MR. WALTERS: Right, over the short term, over the pound-per-hour maximum emissions that occur during commissioning. They're considerably lower.

MR. KRAMER: Because the (inaudible) pounds are coming from a whole annual period, correct?

MR. WALTERS: Right, they're coming from a fairly standard state emission reduction through

the biofilters that are being added to (inaudible), so it's essentially a fairly constant emission reduction. There would be no peaks, and of course you couldn't match the peaks to the same time you would have the initial commissioning emission peaks anyways, even if there were peaks.

MR. KRAMER: But they do serve a purpose for offsetting the operational impacts from the Salton Sea Unit 6 plan, correct?

MR. WALTERS: Yes, they do.

MR. KRAMER: But those emissions from the plant are during operations, are they the same, higher or lower than the commissioning emissions?

MR. WALTERS: On a pound-per-hour basis they're considerably lower, initial commissioning emissions.

MR. KRAMER: Okay, one last point. The applicant was suggesting that the Commission doesn't label -- find the construction impacts, dust impacts in other projects, and they cited several examples to be significant impacts. And I believe they were offering that to suggest that the Commission should not find these commissioning H2S impacts significant, as well.

Did you consider that argument?

MR. WALTERS: I certainly looked at that argument and considered it. The problem with that argument is the fact that the numbers that are presented there don't really take into consideration the fact that staff then requires a significant amount of mitigation through its construction conditions to reduce those impacts, whether they be NOx impacts or PM10 impacts.

Also in certain cases some of those impacts were known to be overstated due to the modeling methods. In some cases, for example Magnolia, that doesn't actually reflect the final record. There was additional work done that was not put on the website, that we were able to do additional modeling to show no commissioning emission impacts for NO2 from the project.

MR. KRAMER: Is there anything else you would like to add to correct your testimony or augment it?

MR. WALTERS: I think the only thing that may be a correction at this point is the fact that right now I'm identifying the areas of moderate nonattainment zone for PM10. And in fact the recent court case says that it probably should

be a serious nonattainment zone for PM10.

I believe all the rest of the corrections are identified in the addendum.

MR. KRAMER: Thank you. No further questions.

HEARING OFFICER SHEAN: All right, thank you. Mr. Carroll.

MR. CARROLL: No questions for this witness.

HEARING OFFICER SHEAN: All right, I have a couple.

How has the District addressed the H2S commissioning issue, if at all?

MR. WALTERS: They have a series of conditions that require the applicant to do some monitoring during initial commissioning; also to do some notification for the community. I believe, I can't remember if the final one requires them to be in English and Spanish, I think it was originally. Made some modifications to those conditions, well, a couple times.

So they are doing certain things that I think will help lower the impact, or at least allow people not to be in areas that may be impacted. However, I'm not sure that it would

cover everybody who may be going to Sonny Bono from wherever, whether they're a tourist from Germany, whether they'd be able to know that there was a notice out there.

HEARING OFFICER SHEAN: Well, all right. If this notification is to basically advise people that there's a commissioning activity that will be going on, that there may be the odor of H2S, which either as an aesthetic thing you can choose to avoid, or if you think you're in a category that may be sensitive, that is a health thing, you may choose to avoid.

Why is that, if you can pinpoint the areas in which this impact is likely to occur why isn't that sufficient if we're trying to avoid impacts to the public?

MR. WALTERS: Well, I think the problem is the public that would be impacted in Rock Hill are not just the general population in the area. The public that goes over -- the people that go up to Rock Hill are visitors to Sonny Bono, which can come from all over the state, the United States and foreign visitors who, you know, aren't going to be in the circulation of the local newspapers and may not see any notices that may be posted.

HEARING OFFICER SHEAN: Well, is that the limitation of the notification, just in the newspapers?

MR. WALTERS: I don't think actually the notification is specified that clearly in the condition. I can take a look.

HEARING OFFICER SHEAN: Okay, but if the District were to attempt to address it to the people who, on a daily basis, during the commissioning, were to be in the area, is that satisfactory at least to the point where the people are not exposed to the -- if there's no technological way to avoid the H2S emissions during -- well, let me just ask you that.

In your opinion is there no technological means to avoid the H2S emissions during commissioning?

MR. WALTERS: In our review of what the applicant provided us we didn't find that there was any cost effective technological method. It is such a short-term event that to put a control technology on something that's only going to occur for a couple hundred hours, a few hundred hours, really isn't a cost effective situation.

There may be some things that can be

done, but, again, they just wouldn't be cost effective.

HEARING OFFICER SHEAN: Okay, well, if there's no technological fix, but the District has in mind an avoidance fix, isn't there reason to essentially try to enhance that if you want to address it, rather than what is your current choice for mitigating it? How do you want to address these exceedances?

MR. WALTERS: Well, I guess, you know, based on the staff assessment what we're saying is we don't think that notification will provide a complete assurance of mitigation.

So essentially what we're identifying, at least the staff in general is identifying, it would be appropriate to do an override for the short-term impacts.

HEARING OFFICER SHEAN: So, even though the District believes that the notification is its means to address this, and will, at least in their opinion, allow them to grant the authority to construct and the permit to operate, the staff's position is that notification and the avoidance mechanism that they're using is insufficient?

MR. KRAMER: Well, I think -- if I

might, I don't want to offer an objection, but I --

HEARING OFFICER SHEAN: Well, you can, but I usually overrule those.

MR. KRAMER: Right.

(Laughter.)

MR. KRAMER: No, I think your question presumes, I just want to clarify, I hear your question presuming that compliance with the District's requirements means that there's no significant impact under CEQA. And that's not what staff's saying.

I think staff is saying that sure it's fine to go along with the District's rules and do everything we can, but after all that there's still going to be a significant impact.

And the other aspect is that we don't believe that under CEQA we should inconvenience others. In other words, say to somebody, those tourists from Germany, that you're not going to be able to see the birds, which may be the whole reason you came here, because you don't want to go out there because it smells bad.

HEARING OFFICER SHEAN: Okay, let's get this straight first. If I understand correctly

your witness has indicated that there's going to be an exceedance of the air quality standards.

Now are you saying that is a LORS issue or it's a CEQA issue, or it's both?

MR. KRAMER: In this particular case it's both. The LORS defines our threshold of significance. But also because there's the health and safety code provision that says you shall not emit a nuisance. Then it's also violating the health and safety code provision.

We're recommending overrides for both, of course. We're not saying stop the project --

HEARING OFFICER SHEAN: And overrides in the plural, both as to --

MR. KRAMER: A LORS override and a CEQA override.

HEARING OFFICER SHEAN: I understand.

MR. TOMASHEFSKY: I have a question. Going back to your Denver study and the context of what you have in figure 8.2-4 which was one page 8-9. Just help walk me through this a little bit.

If you -- suppose the commissioning testing was done in the middle of the summer. According to this chart is it correct to assume that there's no issue here?

MR. WALTERS: You're talking about two different issues. This is the ammonium nitrate formation. This is from the ammonia. The ammonia occurs every day during normal operation of the project, a little over eight tons a day.

The initial commissioning is hydrogen sulfide that only occurs -- well, it occurs during normal operations, as well, but it only occurs in its high quantity, pound-per-hour quantity, during initial commissioning.

And the Denver study is not quoted in any way, shape or form to deal with H2S. Because they're two separate issues.

MR. TOMASHEFSKY: Thank you.

COMMISSIONER PERNELL: I have one question; it's more hypothetical. You were talking about the inconvenience of the smell during startup, am I understanding that right, Mr. Kramer?

MR. KRAMER: The commissioning H2S is what we're talking --

COMMISSIONER PERNELL: Yeah, yeah, the commissioning, which is the commissioning of the plant, the two-week startup period?

MR. WALTERS: Right, the initial

startup; not subsequent plant startups, but the first one.

COMMISSIONER PERNELL: No, right, the first, the very first. And I guess my question is have you ever been downwind of a waste treatment plant?

MR. WALTERS: I've been downwind of several H2S sources, and sometimes I've gotten headaches from them.

COMMISSIONER PERNELL: And how does that handle -- I mean what happens there?

MR. WALTERS: To tell you the truth I'm not sure what those agencies do for those kind of things. I don't know if the quantities are above the California ambient air quality standard for an hour from those particulate situations.

I think another thing we maybe need to bring out is the fact that when you smell something that's an instantaneous concentration. That's not an hourly average.

The likelihood is in using Turner's Law under Gaussian modeling techniques that any particular very short-term, like a second duration while you're doing an inhale, the actual maximum you're going to see from a continual emission

source will be five times the impact or the numerical impact provided in the modeling for a one-hour standard.

So, for example, if we're showing 50 mcg/cubic meter over an hour, you know, the likelihood is if you're standing in that general area you can get a one-second concentration that's as high as 250.

So the same thing can happen when you're downwind of other sources, you can get a bad whiff. But what we're dealing with and what our modeling is, is for an hourly average. So we have already -- we're already not considering, to some extent, those really high concentrations, those one second or, you know, one breath concentrations that can occur during the absolute worst case.

But now to get back to your question, I guess. You know, those are different situations. You know, I'm licensing this particular power plant and I'm --

COMMISSIONER PERNELL: Right, I --

MR. WALTERS: -- looking at the regulations --

COMMISSIONER PERNELL: -- understand, but I guess my general comment would be when

you're dealing with waste treatment plants, for example, there is a certain amount when you start it up, there's a certain amount of odor that you're going to smell simply because of, you know, the commissioning of that plant. And the reason I know this is I've helped build some.

So I'm just wondering at, I mean you got to inconvenience for a finite amount of time versus what is needed for some long-term economic stability for a region. And how do you weigh that?

MR. WALTERS: Well, --

MR. KRAMER: Well, we think that you weigh that in adopting, or considering all the factors and choosing to override the impact.

And I think, I'm speculating, but if we were preparing the EIR for this waste plant you're talking about, and it was putting out the same numbers, we'd be recommending that --

COMMISSIONER PERNELL: Same sort of --

MR. KRAMER: -- that it's significant, it's, you know, short term, and it has all these impacts. But it also has a lot of benefits and recommend overrides.

COMMISSIONER PERNELL: All right.

MR. GARCIA: Yeah, I have some questions, primarily having to do with the particle formation. And just to make sure that I understand what I think you said, let's say that we have this particular plant that's putting out ten pounds of ammonia.

Now that doesn't, I think I heard you say that not all ten pounds of ammonia are going to wind up as being the particulate matter. Some of it is still going to exist as ammonia gas in the air, is that correct?

MR. WALTERS: Right. It's very unlikely that 100 percent would convert.

MR. GARCIA: Okay. Now, it's my understanding that when the ammonia and the nitrate react to eventually form ammonium nitrate, although that reaction can take place in the gas phase, it takes place at a very small rate. And, in fact, the majority does take place in the aqueous phase, is that right?

MR. WALTERS: I think it takes place faster in the aqueous phase. In terms of the amount that takes place at any particular phase would depend on how much aqueous phase would be in the atmosphere.

I think the charts that show a lower relative humidity give you an indication of how much will and won't convert, basically the charts I've shown you. That the conversion as the relative humidity goes down, it pushes the reaction the other way. The equilibrium won't go as far. On terms of the actual speed, --

MR. GARCIA: The speed's a function of the temperature, the reaction speed --

MR. WALTERS: Well, the total -- the total --

MR. GARCIA: -- is a function of the temperature --

MR. WALTERS: The total conversion is also a function of temperature and relative humidity.

But in the plume, itself, of course, it's going to be considerably more moist than the ambient air because it's --

MR. GARCIA: Is that --

MR. WALTERS: -- coming out of the cooling tower, so it's coming out essentially saturated --

MR. GARCIA: And that's where most of the reaction takes place? Correct?

MR. WALTERS: Well, the ammonia is in the plume. It's in the cooling tower plume, so that's where it's going to react.

MR. GARCIA: Okay. Let me ask another question. I think when you were talking about ammonia rich -- let me take an example. Let's say that we're combusting carbon and oxygen, and take one part of carbon and two parts of oxygen to form carbon dioxide. And those ratios are stoichiometric ratios.

If we were to have, in the reaction vessel if we were to have three parts of oxygen and one part of carbon, you'd still make one unit of carbon dioxide. And the excess carbon -- I mean the excess oxygen would be considered kind of like the ammonia rich condition.

So, we're basically talking about excess in stoichiometric amounts that could react in the atmosphere, aren't we?

MR. WALTERS: Right, the difference being that your example is not a reversible reaction. So it doesn't go back --

MR. GARCIA: I intentionally picked that, yes. All right, thanks.

HEARING OFFICER SHEAN: Are you familiar

with the commissioning period conditions AQ1, 2 and 3?

MR. WALTERS: Yes.

HEARING OFFICER SHEAN: Was the Commission Staff part of the formulation of these? Or were those the District's conditions merely -- I mean the title up here says SSU6 District conditions. So, are these representative of District conditions here on this commissioning period conditions?

MR. WALTERS: They are the District conditions.

HEARING OFFICER SHEAN: Okay. Now, have they included -- I see that the Air Resources Board and EPA have been stricken from these in the supplement or the addendum. And the CPM is left in. Is that right?

MR. WALTERS: Correct.

HEARING OFFICER SHEAN: Now what -- I'm trying to understand what role the CPM would have in approving the commissioning plan, if it's fundamentally a District function to handle the commissioning as it would be, for example, in a combustion type power plant, and whatever the commissioning plan is. What is the staff going to

do with the commissioning plan at this point, as far as you know?

MR. WALTERS: I believe we'd review it just to see what was being provided for in terms of the monitoring requirements, in terms of the noticing requirements. A lot of it, right now a lot of the conditions is somewhat open. Exact activities that are to be performed aren't yet known, so I think we would like to be able to review it to make sure that we wouldn't want to ask the District to do something else, something in addition. Or just to say, yeah, we think the applicant is doing an appropriate level of activities during the commissioning.

HEARING OFFICER SHEAN: Okay, well, I guess one concern here, sort of from the Commission level, is whether or not if the Commission were to decide, and this is hypothetical, that the notification provisions that the District has are sufficient to meet our concerns, and we believe to meet the law, whether or not the staff is going to come back through in the review and approval of the commissioning plan, and essentially try to reimpose some condition upon the applicant that the Commission, itself,

hadn't decided in its decision.

MR. WALTERS: Well, we aren't proposing any other conditions. We're proposing that it's appropriate to override. So I think my answer is we would just make sure that these conditions are being followed.

HEARING OFFICER SHEAN: Okay. Let me just flip back here to AQC13. And my reading of it is as you explained, but let me just ask you about the last sentence here, because it says, alternatively the applicant may reduce ammonia emissions from other sources including, but not restricted to, the other geothermal power plants in an amount necessary to offset the SSU6 annual emissions as determined through AQC12, right?

Has AQC12 changed during any of the closing weeks here of the proceeding prior to the evidentiary hearing, or is it as is shown in your September 3rd part two?

MR. WALTERS: I don't believe it's changed. If it has, it would be in the addendum. Essentially all we're doing with AQC12 is establishing what the true baseline emissions are for the plant.

Because, you know, at this point we have

an ammonia emission estimate. But it's based on assumptions for the amount of ammonia that's actually in the brine. We need to prove out those assumptions and prove out the actual amount of ammonia that's emitted from these various activities, mainly the cooling tower since most emissions come from the cooling tower.

HEARING OFFICER SHEAN: Okay, so the idea here is to merely reduce it at its source, if you will, the --

MR. WALTERS: Well, the idea is to --

HEARING OFFICER SHEAN: -- the constant --

MR. WALTERS: Well, the best way is reduce it at its source, but what we're trying to do is reduce it in the quantity that it's being emitted. And that's what AQC12 identifies is what is the true emissions.

We don't want to say right now we should reduce it 2750 tons if it turns out that when they're actually looking at the plant and do a nitrogen balance, that the emissions are only 1300 tons a year.

HEARING OFFICER SHEAN: Okay. And did I understand you to say in your testimony -- of

course we'll have a transcript of it -- is that the staff doesn't know how much ammonia is being formed, and you used the 1 percent or 10 percent, and that you don't know. So that there are in this, in getting from the ammonia emissions to what the impact is, numerous variables such as temperature and humidity and essentially the chemistry occurring in the atmosphere before you can come to a conclusion that there is an impact at some point in the modeling exercise?

MR. WALTERS: Well, essentially what we're saying is we don't have enough data to come up with a numeric level of impact.

HEARING OFFICER SHEAN: So then there's no number?

MR. WALTERS: Right.

HEARING OFFICER SHEAN: And the mitigation, therefore, -- how should the Commission, if it wants to consider your proposals for mitigation or create its own, how would we understand the appropriate level then if we cannot arrive at a number?

Usually if we were talking about instead of H2S we were talking about NOx or some other thing like that, the modeling would generally

provide us with a number.

And so how --

MR. WALTERS: I'm not sure it would necessarily provide a number in terms of secondary particulate, depending on how much information's available in a particular basin. Some of that has been done, say, in the Central Valley, there are some numbers that come out.

But I'm not sure that the same level of available information is available throughout the state. So I don't think in every case like this we're always going to be able to give you a number per se. And in this case, since we don't have a lot of information, I'm not sure I could give you a number if we were trying to do the same thing for NOx --

HEARING OFFICER SHEAN: No, I'm asking what do you -- what does the Commission do in the absence of a number? Because ordinarily we do have a number. In the proceedings up in the Valley we've just done, and we've talked about secondary particulate formation in the areas that are ammonia rich, et cetera, et cetera, you know the cases that have been before the Commission recently. And we've had -- staff has come up with

numbers in terms of what they wanted as offsets or something else. And yet we don't have that here, isn't that correct?

MR. WALTERS: We don't have anything as definitive or anything the District would recommend or CARB would recommend, either. I think one thing that you should remember in terms of the offsets for all those other cases we're always talking about greater than one-to-one.

So, you know, for NOx, for example, or for PM10 or for SO2 for PM10, you know, we're always talking about ratios that are greater than one-to-one when we're looking at those things. I don't think we're looking, we would necessarily look at a greater than one-to-one here.

The problem being since we don't know what that number would be less than one-to-one, I think it's more appropriate to mitigate the actual emission on a type-for-type basis, ammonia-for-ammonia. And therefore you've mitigated the problem.

HEARING OFFICER SHEAN: Okay. I mean I think I understand. All right.

MR. GARCIA: I want to follow up on that a little bit, real quick. And back to my earlier

point. Let's say that the unit puts out something like 17 pounds of ammonia. If all that ammonia were to react with nitrate in the air, the equivalent amount of particulate matter would be something like 69 pounds.

But we know that not all of the ammonia converts out to particulate matter; a lot of it stays in the (inaudible).

The other thing I wanted to make sure that I understand is that the offsets that are purchased are, I'm going to call them delivered. If I buy 10 pounds of offsets that means that somebody at some point has actually reduced emissions by 10 pounds, is that right? Is that a true statement?

MR. WALTERS: In fact, there usually is some distance ratio or something else that's actually even a little more than that.

MR. GARCIA: Okay. So, if we were to use the worst case, the 17 pounds of ammonia turned into 69 pounds of particulate matter, and were to go out and purchase 69 pounds of particulate credits, we would way more than offset the particulate impact.

So the answer to the question that

Hearing Officer Garret was asking was somewheres between zero and 69 pounds, I think.

MR. WALTERS: Yeah, although I think ammonium nitrate is 98 pounds, but yeah, zero to the molecular weight of ammonium nitrate. It would be somewhere in there.

MR. GARCIA: Okay.

MR. WALTERS: The problem is, like I said, it's different, you know, throughout the year. I mean it's going to be a winter max phenomenon in general.

MR. GARCIA: But it will never be more than that amount.

MR. WALTERS: No, it will never be more than that amount. But that amount, if --

MR. GARCIA: But it will always be less than that amount, right?

MR. WALTERS: Right.

MR. GARCIA: Because it never goes over 100 percent.

MR. WALTERS: Can't get more than 100 percent.

MR. GARCIA: Okay.

HEARING OFFICER SHEAN: Okay. Any redirect?

MR. KRAMER: No.

HEARING OFFICER SHEAN: All right. Thank you very much, you're excused.

Mr. Carroll, we have some local governmental representatives. If it's all right with you --

MR. CARROLL: Yes.

HEARING OFFICER SHEAN: -- we'd like to invite them to come up and give their comments. Supervisor Gary Wyatt.

SUPERVISOR WYATT: Good afternoon.

PRESIDING MEMBER KEESE: Welcome.

COMMISSIONER PERNELL: Good afternoon.

SUPERVISOR WYATT: Thank you for the opportunity to stand before you and share some thoughts. And thank you for coming down to the lovely Imperial Valley at such a lovely time of the year.

HEARING OFFICER SHEAN: Your skies are clear.

SUPERVISOR WYATT: Yes, they are clear, and we are all very concerned, of course, for the terrible tragedies and losses that are occurring throughout our state in the last few days, and probably in the next few days to come. And we

have many prayers and thoughts for those.

We're kind of fortunate, I guess, in some ways. I sit on RCRC, Regional Council Rural Counties. When we talk about forest issues it's something I have nothing to talk about, since we have no forest at all. So it's something that -- we have many other situations.

But let me introduce myself. My name is Gary Wyatt; I am the Supervisor for District Four, which is the northern part of the County, and all of the area that is under your concern is within my District. So I have a great concern and a great interest in the proceedings that are going on here.

Our valley is historically -- has a historical high rate of unemployment; in the area of 20 to 24 percent. We have one of the lowest per capita totals in the State of California. Every year we're at or near the bottom of the State of California in that particular arena.

This geothermal project is a very positive opportunity for our County. It's one of the resources that we have readily available that is in great need throughout the state, and really throughout the southwest part of the United

States.

The project enjoys immense public support. As a matter of fact, I doubt that you will be able to find anyone anywhere in our valley that has anything of any significant problem with this particular project. This renewable, environmentally friendly green source of power for a very needy California market, I think, is a classic poster child for the win/win situation.

The benefits of this project reach to every side of the issue. For our valley it means somewhere in the area of 550 to 600 well-paid construction jobs. The local economy will win as millions of dollars are pumped into our area businesses, motels, restaurants and supply centers.

Local government, schools and students from the north end will be huge winners, as well, as they will benefit from the expected $3 million plus in new property taxes that will be generated by this plant.

And the environment will be a beneficiary as well, from the clean source of renewable green power that will provide the needs for many people throughout our area, as well as

southern California and the rest of California, as well.

Air quality which I hear some of the discussion about here. We know something about air quality concerns in our area here. Since we sit in a basin where we have to suffer from the consequences of the poor air quality that emanates from a foreign country; and yet we are made to pay the price for that particular problem.

So we know a great deal about air quality problems, PM10 and so forth. But this particular project is not going to cause a problem with that particular area. So air quality will be maintained and not be a source of problems for us.

Located next to an incredible wildlife refuge and wildlife resource, geothermal has for many years been a friend to the birds and the fish and the rest of our environment in that particular area. As you know, Sonny Bono National Refuge sits right next door to this particular area. And so they've been friends and neighbors for many many years. They will continue to do so. So for the environment this project is a huge win/win.

It's rare that projects like this come along. And we see many many projects in our

County as all counties do. And rarely do we ever get a project that comes along that has this many wins without any of the negative mitigation needs that go along with that.

So when you look at the huge economic boost that this kind of project is to our local economy, and one of the economies that is the greatest needs in the entire state. When you look at the substantial and long-lasting employment opportunities it's going to present to families here that are in desperate need of such.

And then when you look at what it does to the environment, as it keeps it clean, it keeps it green, and it keeps it environmentally friendly.

Then for all of us that will benefit from its construction and for all of those that will enjoy its production this is a project that deserves your support. And I hope that you'll give that to it.

Thank you very much for your time.

HEARING OFFICER SHEAN: Thank you. We have another representative from an elected official's office, and I think it's Aida Gates, is that right? You wish to speak?

MS. GATES: Good afternoon. My name is Aida Gates and I --

COMMISSIONER PERNELL: Welcome.

MS. GATES: My name is Aida Gates. I am Area Representative for Senator Ducheny. And as Mr. Wyatt previously mentioned I echo his sentiments, thank you very much for coming down here. I'm glad the weather wasn't as bad as it has been in the past weeks.

I have a letter here from Senator Ducheny that she actually wanted me to read on her behalf:

> Dear Board Members: I would like to offer my support for the proposed construction of a 185 megawatt geothermal power plant near the Salton Sea. This project known as the Salton Sea Unit 6, SSU6, geothermal power project will provide an excellent opportunity for the Imperial Valley to utilize its geothermal resources to expand the region's energy capacity.
>
> As you are aware, geothermal power plants provide a renewable and reliable source of energy. If approved the SSU6 geothermal power plant will be a vital source of energy,

particularly for the Imperial Valley which is highly dependent on out-of-state energy sources.

CalEnergy, the applicant for this project, has already taken steps to negotiate with the Imperial Irrigation District on the sale of electricity from this power plant. This energy transaction will help diversify the District's energy portfolio needed to insure the Imperial Valley is protected from potential energy deficits.

While SSU6 will be an important energy source, it will also stimulate needed economic activity in the Imperial Valley by creating jobs both directly and indirectly from the energy plant. By providing both an indigenous energy supply and an economic opportunity, the SSU6 will be a major benefit to the Imperial Valley and its residents.

For these reasons I urge your support for this project. And thank you very much for your time and consideration of this important matter. And if I can be of any assistance, feel free to contact me."

I have some -- this letter will be going

out possibly tomorrow or the next day. I'm sorry I didn't make copies for you, but as you notice, or may notice, she hasn't had an opportunity to sign it yet.

Thank you very much for your time.

HEARING OFFICER SHEAN: That would be wonderful.

COMMISSIONER PERNELL: Thank you .

HEARING OFFICER SHEAN: We look forward to getting it, thank you.

All right. We have another representative from an elected official.

MS. BARRETT: Good afternoon; thank you for coming here, Commissioners, and listening to what everyone has to say.

My name's Glenna Barrett. On behalf of Assemblywoman Bonnie Garcia I'd like to express support for CalEnergy's geothermal project, Salton Sea Unit 6.

Bonnie has supported this project in Sacramento in the past and continues to support it because increasing renewable and clean energy resources are very beneficial to the environment.

This project provides jobs, revenues and renewable energy benefits to one of the most needy

regions of California.

Thank you very much for your time. Have a great day.

HEARING OFFICER SHEAN: Thank you very much.

COMMISSIONER PERNELL: Thank you.

HEARING OFFICER SHEAN: We can take a brief opportunity here to have some public comments. Yes, sir, if you'd like to come up. And then we'll get back to our air quality matters.

MR. GONZALES: My name's Oscar Gonzales and I'm a retired academic teacher and bureaucrat. I was the first Affirmative Action Officer of the Imperial County many years ago, from 1975 to '80.

Independent of the comments before me and the merits of the program my concern isn't hypothetical but empirical and factual. I think when you consider the methodology by CalEnergy's program, empirical data, scientific framework, merits of improving the quality of life, people making money, I wish to submit to your board the concern based on the adverse sociological and political impact on low-income people in Imperial County.

For example, I think the project is estimated that it's going to take two years. And upon completion will hire, oh, it's going to need people in the construction phase, and when it's in full completion will hire about 70 people to operate and program.

I feel compelled to challenge to raise this issue because when you look at the record of CalEnergy in Imperial County, it hasn't manifested its support for training local people in the past. Case in point, the majority of the best paying jobs are held by white people.

We represent the vast majority of the people in Imperial County. We have highly trained qualified people in Imperial County. The majority of the people, I don't know how many people you could say that CalEnergy has hired, blacks or other minorities. But I think we need to work together; we need to support this program.

But by the same token, I think what about us? We have a lot of people that are highly qualified in Imperial County. I'm not looking for a job, I have a masters degree in public administration. And I have a BA from UCSB in 1970.

But when are we going to support the local home team? Yeah, it's going to hire people, but I would challenge the board of supervisors, IID, customs, immigration, CalEnergy, and even in the state, how many blacks have you hired from local? How many minorities right now? The best paying jobs are held by white folks. That's not fair.

I don't mind if capitalism prevails. I'm not against this project. But I think this concern needs to be raised time and time again so we won't forget that we're all Americans and we need to represent and hire people.

Calexico Community Action Council, I was a board member many years. When you look at the outskirts of Calexico, industrial park, thanks to Governor Brown, Senator Cranston, who may rest in peace, Jack Ortega, among others that have perished or are no longer with us, supported those programs.

CCAC has an unblemished record of hiring and training people. You've got people that are local here. There's one gentleman, Ruben Gonzales, they're highly qualified, but yet we don't have those training programs.

So I just wanted to make this concern to your board, and especially CalEnergy. They have to sit down and work with us. We can provide assistance, and we have highly qualified people.

Thank you for coming down, and I appreciate that you don't have to suffer the weather that we do. But I love it; I wouldn't want to live anywhere else but Imperial County.

Thank you very much and God bless you.

HEARING OFFICER SHEAN: Thank you, Mr. Gonzales.

COMMISSIONER PERNELL: Thank you.

PRESIDING MEMBER KEESE: Thank you.

HEARING OFFICER SHEAN: Okay. Why don't we do this. We had a brief comment period, let's go to the applicant and we'll finish their air quality matter. And then just before we take a break we'll go back to public comments.

Then we'll have a brief break and then continue on with any rebuttal information as well as our biology section. Then we'll be getting pretty close to getting this done.

MR. CARROLL: Thank you. Applicant calls Mr. Paul Neil to testify in the area of air quality, and I'd ask the witness be sworn, please.

Whereupon,

PAUL NEIL

was called as a witness herein, and after first having been duly sworn, was examined and testified as follows:

MR. CARROLL: Thank you.

DIRECT EXAMINATION

BY MR. CARROLL:

Q Would you please state your full name for the record.

A Paul Neil.

Q And are you the same Paul Neil that submitted prepared testimony in this proceeding on October 17, 2003?

A Yes.

Q Am I correct that there are a number of exhibits identified in your prepared testimony that you are sponsoring today?

A Yes. I'm also sponsoring appendix G of the AFC docket number 26373; and applicant's response to set number five of CURE's data request as they pertain to air quality docket number 28569.

These documents have been docketed with the CEC but were not listed in my prepared

testimony.

Q To the best of your knowledge are the facts contained in the prepared testimony including the referenced documents incorporated therein still true and accurate?

A Yes.

Q And have your opinions or conclusions changed in any way since the filing of your prepared testimony?

A No.

Q Would you provide a brief description of the analysis that you completed in your conclusions?

A Yes, I would. The air quality analysis consisted of one, a review of the existing air quality of the area; an estimate of construction, commissioning, operations and temporary activity emissions; dispersion modeling; an assessment of compliance with air quality standards; and then identification and evaluation of potential mitigation measures.

My analysis and conclusions were consistent with CEC Staff's except for two notable exceptions.

The first exception is staff's

conclusion that the commissioning H2S emissions will result in a significant unmitigated impact. I disagree for the following reasons.

Their conclusion is inconsistent with past CEC practices and assessments. Two, emissions are mitigated with offsets from the Leathers Geothermal Power Plant and with the District-required commissioning plan.

Also staff modeling shows that no residential areas will be impacted. Obsidian Butte, which is seldom visited, has modeled exceedances of five hours. Rock Hill, which is occasionally visited, has modeled exceedances of one hour.

Finally the District has determined that this project is consistent with all their rules and regulations.

The second exception is staff's conclusion that the operational ammonia emissions will result in a significant impact. Staff has concluded that the area if ammonia lean so that any increase in ammonia will generate a secondary particulate.

I disagree that the ammonia is ammonia lean for the following reasons. The USEPA

considers most of the west ammonia rich. CARB considers the rural counties of California to be ammonia rich. The District considers the area around the project to be ammonia rich.

Staff has considered every other CEC project to be located in ammonia rich environment when they've looked at that issue, even those located in the South Coast urban areas, such as Mountainview and El Segundo.

And based on CARB and District emission inventories we have shown that the County is ammonia rich.

Staff has also stated that even if the area was ammonia rich any increase would result in increases of particulate formation. I disagree with that conclusion for the following reasons.

Again, it's inconsistent with past CEC assessments. Staff has noted that ammonia emissions on other projects would not necessarily result in additional secondary PM10 formation. They did that on El Segundo and they also did that in the San Joaquin projects.

Also, discussions with personnel involved with ammonium nitrate air quality studies confirmed that changes in ammonia emissions and in

ammonia rich environment does not lead to changes in particulate concentrations.

And based on the above I disagree for the need of AQ-13 and request its deletion. Thank you.

Q Does that complete your testimony here today?

A Yes, it does.

MR. CARROLL: Thank you. Mr. Neil is now tendered for cross-examination in the area of air quality.

HEARING OFFICER SHEAN: Why don't we do a little housekeeping measure. Is there objection to the admission of his testimony and the references that he cited?

MR. KRAMER: No.

HEARING OFFICER SHEAN: All right, it is admitted, then.

All right, the witness is available for cross?

MR. CARROLL: Yes.

HEARING OFFICER SHEAN: Mr. Kramer.

MR. KRAMER: Couple minutes.

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CROSS-EXAMINATION

BY MR. KRAMER:

Q Mr. Neil, do you recall how many visitors Rock Hill has annually?

A No, I don't. Will mentioned maybe 10,000 a year.

Q Does that sound about right to you?

A I believe so.

Q And did you describe that as a moderate amount of traffic just a moment ago?

A Seldom visited is the way I describe it.

Q Okay. And then you were talking about the whole west and rural areas in California, describing them as being characterized as ammonia rich. Did you understand that to be on average, or at every moment of every day or what?

A I would consider that to be a general statement of the air quality. Normal air quality is ammonia rich.

Q But the amount of ammonia in the air relative to other parts of the air varies over time, correct?

A Correct.

Q And the temperature varies, the humidity?

A Well, with ammonia rich it's either going to be always ammonia rich unless there's hot spots of acid gasses. That's what causes the ammonia lean situation. If there are sources of NOx and SO2 then you're going to wind up having ammonia lean environments.

For instance, the southeast, even eastern portion of the United States is ammonia lean because there's so many acid gasses being emitted.

Q Thank you.

MR. KRAMER: No further questions.

COMMISSIONER PERNELL: Mr. Neil, your testimony is that this area is ammonia rich?

MR. NEIL: That's correct.

COMMISSIONER PERNELL: And staff is asserting that it's ammonia lean?

MR. NEIL: That's correct.

COMMISSIONER PERNELL: But maybe that's, staff is saying something different. Maybe you all agree that it's ammonia rich? Just for my clarification can I ask your air quality witness to explain.

MR. KRAMER: I will not object.

COMMISSIONER PERNELL: I'm sorry about

this; I must have missed this along the way. You're not asserting that this is an ammonia lean area?

MR. WALTERS: I believe my assertion is the fact there isn't enough data to say either way, but there's a likelihood there will be times when it's lean and there will be times when it's rich. It may be rich most of the time, but it may be lean other times, particularly as I noted earlier, in my earlier testimony when the ambient air is being influenced predominately from pollutants from the South Coast Air Basin, which is not noted to be ammonia rich and is noted to be an ammonia lean area.

COMMISSIONER PERNELL: So would there be pockets of hot gas that Mr. Neil was talking about that would create an ammonia lean environment?

MR. WALTERS: It would essentially be --

COMMISSIONER PERNELL: Let me -- can I rephrase that? Is there a history of pockets of hot gas in this area? To your knowledge.

MR. WALTERS: No, I think my testimony bears on the fact there isn't enough information to make a conclusion that it's always ammonia rich or always ammonia lean. And that it could be

either at various times due to the influences of the other polluted air basins in the area that are upwind of this air basin.

So I'm not saying it's ammonia lean. I'm not saying it's ammonia rich. But I am saying that in either case we expect that there will be some additional secondary particulate formation due to additional ammonia from this project.

COMMISSIONER PERNELL: Okay.

HEARING OFFICER SHEAN: I'm sorry, I'm going to ask you to come back and make sure you're saying what I think you're saying, or understood you to say.

You don't have sufficient information to characterize as either rich or lean, but in either case any added ammonia is likely to cause particulate formation, is that the fundamental testimony --

MR. WALTERS: Right, under appropriate conditions. Particularly under winter conditions when essentially you have to go back to those charts which kind of show you the different temperature and relative humidities where the increase in the ammonia ratio will cause additional formation.

HEARING OFFICER SHEAN: So you're looking for more relative humidity to get to cause the particulate formation, is that essentially the condition that you think is going to create that? Relative humidity with the temperature change?

MR. WALTERS: It's a combination of temperature and relative humidity. There would be probably very little effect at extremely -- well, at conditions like today, which are what, in the 90s and relative humidity may be in the 10s or less.

HEARING OFFICER SHEAN: Right.

MR. WALTERS: Probably very little effect. But in winter when you may have a condition of 60 degrees and 60 percent relative humidity you would see an effect.

PRESIDING MEMBER KEESE: And that would occur in winter at night, or --

MR. WALTERS: In winter during the day, in the spring, in the fall. And basically you'd have to take a look at the met data --

PRESIDING MEMBER KEESE: The higher humidities probably at night, and lower temperatures at night?

MR. WALTERS: In general, or first thing

in the morning.

PRESIDING MEMBER KEESE: I guess my question would be is that when people are visiting sites? I mean is there a correlation between that time and when we'll have our visitors --

MR. WALTERS: I think we're --

PRESIDING MEMBER KEESE: -- making their rare visits to these --

MR. WALTERS: I think we're crossing impacts again. We're talking about the ammonia secondary particulate, which is more of a region-wide issue, not the H2S impact which is more specific.

PRESIDING MEMBER KEESE: Okay, thank you.

MR. WALTERS: Just for commissioning.

MR. TOMASHEFSKY: Let me ask you one question on page 7 of your written testimony. You make a comment, mean annual temperature from the nearest station 72.4 degrees, and the average relative humidity for the county is 25 percent.

What -- and I know we're talking about averages, what frequency would you see the relative humidity getting up in that 60 percent range? I know it's somewhere within this

testimony where you talk about the average rainfall is about three inches a year.

So I mean intuitively you wouldn't expect the humidity to be that high period. Could you comment on that?

MR. NEIL: Well, on average it's that 25 percent, but it fluctuates, it fluctuates somewhat. But I don't know, haven't looked recently at the variations there.

MR. TOMASHEFSKY: Okay, and is the assumption here that this is going to operate pretty much with 100 percent load factor?

MR. NEIL: That's correct.

HEARING OFFICER SHEAN: And that concludes your air quality presentation?

MR. CARROLL: I have one redirect question for Mr. Neil.

HEARING OFFICER SHEAN: All right.

REDIRECT EXAMINATION

BY MR. CARROLL:

Q Mr. Neil, Mr. Walters suggested that the environment in the vicinity of the plant could be influenced by transport of the acid gases into the region such that even if normally, as a result of native sources the environment would be ammonia

rich, that it could, at times, be ammonia lean as a result of transport.

Do you agree that transport emissions from South Coast or from Mexico are likely to alter what you characterize as the normally ammonia rich environment in the vicinity of the plant?

A I do not agree with staff on that issue. I did take a look at the total emissions of those air districts, also at Mexicali, to determine if it was a valid argument. And the data in my written testimony shows that when you consider all the emissions that it's still ammonia rich.

And I'd like to add that the inventories for ammonia are under development. People are focused in on making those as accurate as possible. And everyone that I've talked to winds up saying that they've really understated the amount of ammonia emissions.

I would expect that all the districts would wind up increasing their ammonia inventories over time so that these numbers are probably understated.

Q Thank you.

MR. CARROLL: That concludes our

examination of Mr. Neil, and we would move the admission into the record of the exhibits sponsored by him.

HEARING OFFICER SHEAN: All right. Those were included in your initial description of his testimony, right?

MR. CARROLL: Yes, they were. They were identified in the prepared testimony filed on October 17th, and there were two additional exhibits, appendix G to the AFC and response to set number five of CURE's data requests that were identified by him today. And we would move admission of those, as well.

HEARING OFFICER SHEAN: Okay. I thought they were in, but if they weren't is there objection?

MR. KRAMER: No objection.

HEARING OFFICER SHEAN: Okay, they're in.

MR. KRAMER: We would probably need to move in the staff exhibits that we passed out today, the court case and the two studies.

HEARING OFFICER SHEAN: All right, we have three --

MR. KRAMER: We'd just be asking the

Committee to take notice of the court decision.

HEARING OFFICER SHEAN: Yes, as far as that's concerned, it's Sierra Club and the Imperial County Air Pollution Control District versus the United States Environmental Protection Agency. The case currently is cited in the West Law citation and we'll get something that's better, as 2003 WL 22309239. It will appear somewhere in the Fed.3d.

The other is the Northern Front Range Air Quality Study Final Report. This appears to be portions of section 8 --

MR. KRAMER: It is all of section 8.

HEARING OFFICER SHEAN: Is it all of section 8?

MR. KRAMER: But the rest of it is huge.

HEARING OFFICER SHEAN: Okay, there was no indication how far 8 went.

But is there objection from the applicant to admission of that section? Or do you want us to do the whole report? And we could get it in electronic form from the staff if you feel that's necessary.

MR. CARROLL: I don't believe that's necessary.

HEARING OFFICER SHEAN: Okay. Then the staff offering of section 8 of the Northern Front Range Air Quality Study Final Report would be admitted into evidence.

And lastly, is this effects of change in sulfate ammonia and nitric acid on particulate nitrate concentrations in the southeastern United States.

Do you want that in the record, or do you just want that a matter that was referred to by your witness in the formation of his opinion, professional opinion?

MR. KRAMER: It would be helpful to have it in the record so --

HEARING OFFICER SHEAN: Okay.

MR. KRAMER: -- it can be considered with his opinion.

HEARING OFFICER SHEAN: That's volume 53, March 2003 of the Journal of the Air and Waste Management Association. Is there objection to that?

MR. CARROLL: No.

HEARING OFFICER SHEAN: All right, it's admitted.

Do you have any rebuttal testimony you

want to do at this time?

MR. KRAMER: One brief question for Mr. Walters.

HEARING OFFICER SHEAN: Okay.

DIRECT EXAMINATION

BY MR. KRAMER:

Q Mr. Walters, a minute ago we were reminded that the applicant had found that the average humidity on an annual basis was 25 percent in this area.

Did you come to verify that number?

A Actually using the data that was provided by the applicant for the Imperial Airport the number was actually higher on an annual average. In the winter the number was, I believe, somewhere between 55 and 60 percent for an average winter relative humidity.

MR. KRAMER: Thank you.

HEARING OFFICER SHEAN: Mr. Carroll, do you have a question of the witness?

MR. CARROLL: No, I do not.

HEARING OFFICER SHEAN: Okay. And do you have a rebuttal?

MR. CARROLL: No.

HEARING OFFICER SHEAN: No. Let me

just, before we get off the topic of air quality, I have some questions that are related to other conditions that appear in that. Is your witness the ones who can respond to any of those, do you think?

MR. KRAMER: Mr. Walters should be able to. I'll put him on the spot.

HEARING OFFICER SHEAN: All right. Sure.

I would like an explanation on the record, please, for moving to the 50 horsepower diesel engine as the threshold. Typically the conditions that have been in the construction conditions have shown 100 brake horsepower or more. But I understand that due to the unavailability currently of ultra low sulfur fuels that between the applicant and staff you've essentially traded 50 horsepower for the nonavailability of that ultra low sulfur diesel fuel, until it may become available within a certain distance, is that fundamentally correct?

MR. WALTERS: I'm not sure if it's exactly a trade, because I believe in at least the last couple cases that I've worked on, I've been using 50 as a basis.

And the change essentially is related to the change in the equipment sizes that we've been seeing in the equipment schedules we've been getting for the various projects. And we're starting to see a lot more equipment between 50 and 100 horsepower.

So we wanted to capture those into the tier one requirement, particularly now that we're several years from the model year requirement for tier one. By the time these things are in construction we're talking about equipment that was first around six, seven years ago.

So, essentially we're just broadening the base to help increase that mitigation level. Also it helps lower the -- it does help lower the PM10 and in this case, to some degree we use as a tradeoff. But I think in general we decided to deal with the ultra low sulfur based on availability issue moreso than the 50 --

HEARING OFFICER SHEAN: Okay, so the 50 now represents essentially the new staff policy then?

MR. WALTERS: Right, --

HEARING OFFICER SHEAN: With respect to engine size? And then I ask what are you finding

in terms of engines of the 50 to 100 horsepower range are either ARB or EPA certified? Is it that there are a whole lot of engines that are not, that you either want them because they're not to be equipped with soot filters, or that they're now is a substantial inventory of 50 to 100 horsepower tier one engines?

Are we trying to make up for something that isn't happening out in the marketplace? That is, engines of the 50 to 100 horsepower range that are not tier one or ARB or EPA approved or certified, I mean?

MR. WALTERS: No, I think what we're trying to make up for is essentially the fact that we haven't been dealing with what turned out to be a bigger category of equipment than we had thought in the past. That there are a lot more equipment in this size range being used on these projects.

And it was our, I guess, original estimate. And a lot of that had to do with the estimates that were provided by various applicants on equipment size that essentially what you would see on a site would be above 100 horsepower. So we essentially put our cutoff at 100 horsepower.

But what we're seeing is a lot of lifts,

a lot of forklifts, backhoes, even some excavators are coming in under 100 horsepower that are being used, you know, quite a bit on these sites. And we essentially had kind of missed that category, because that category, in and of itself, we had not required soot filters on, either. Essentially it was an unregulated kind of equipment that was a lot bigger piece of the pie than we had originally considered.

HEARING OFFICER SHEAN: Can you characterize how burdensome then, as a category of existing equipment, it is to either have these certified or capture them in the regulatory sense by the Commission upon the construction contractors?

MR. WALTERS: Well, this equipment would have had to have been around first starting in, I believe, model year 1998, if not 1997. So, by the time they start construction there will be six or seven years model year available for these type of equipment.

Based on median age work that I've seen EPA do, that means at least 25 percent of the equipment probably are of this age, and possibly more.

So it's not like they're going to be rare. There's going to be a large fraction of the available construction population should be tier one.

HEARING OFFICER SHEAN: Okay. In your condition AQC3, I think it is, almost -- let me put it this way, the graph above the verification, in the middle of that paragraph three it says: the activities shall not restart until one full hour after the shutdown."

Can you explain to me the reason for that limitation on the restart of such activities?

MR. WALTERS: Excuse me, can you point out the exact location again?

HEARING OFFICER SHEAN: Okay, what I'm looking at now is in condition AQC3, in the staff final assessment addendum that appears on page 11. And if you're on -- is that the best way for you to get it, as part of the addendum? Okay.

It's the third complete paragraph from the top. Begins with, "The AQCMM shall direct a temporary shutdown of the source of the emissions if step B specified above fails to result in adequate mitigation within one hour of the original determination."

And then it's the following sentence: The activities shall not restart until one full hour after the shutdown." I'm asking you for an explanation of why the concept of a full hour is necessary.

MR. WALTERS: I believe that essentially allows them enough time to provide the additional mitigation that -- so that they can get the activities done before they start up again.

HEARING OFFICER SHEAN: So if the sentence were to read: The activities shall not restart until the mitigation is applied" that would accomplish your objective?

(Pause.)

MR. WALTERS: It might with a rewording of some of the rest of that paragraph. I'll have to take a longer look at it.

HEARING OFFICER SHEAN: Okay. I think the Committee would like the staff to do something like that, because the one hour doesn't serve the purpose. The objective isn't to consume an hour. The objective is to have the mitigation implemented right.

MR. WALTERS: Correct.

HEARING OFFICER SHEAN: So let's do what

we intend to do. Because if it took five minutes to implement the mitigation there's no reason to have a bunch of guys and their equipment standing around for 55 minutes. If it took an hour and five minutes, then you need to wait until you actually get it implemented. And I think that's what we have in mind. Let's do what we want to do, which is serve the intent of the condition, rather than merely observe a time thing.

So, if you want to give us some language on that that does that, we'll consider it, other than doing the editing ourselves.

MR. WALTERS: Right.

MR. KRAMER: What would the timeframe for that effort be?

HEARING OFFICER SHEAN: At your convenience. Okay, that actually does it for me. I have another one. We amended your -- in the SMUD proceedings we didn't use your AQC3, again simply because the objective there was to meet the requirements of the fugitive dust abatement rather than having somebody watching a windsock till they got to 25 miles an hour. And we're likely to make that change, as well.

Oh, yes, I have something more. We're

going to go to your final staff assessment, part two, condition AQC4, since it relates to the one I was just mentioning.

If you have that, the last sentence: No construction activities are allowed to cause any visible plume in excess of 200 feet beyond the centerline of the construction of linear facilities, or cause visible plumes to occur within 100 feet upwind of any occupied structure."

Now, I have to admit, as I keep reading through all this material I look for pieces of humor. And I came up with a possible occupied structure on a worksite. And I wondered what it is that you have in mind in thinking of these occupied structures.

Are we talking trailers, or something like that? What is an occupied structure? And please tell me it's not a plastic one-man building.

MR. WALTERS: Essentially it's anything that would be occupied that would be outside of the control of the applicant. So, essentially it would be a residence or a place of work that would be along this linear.

HEARING OFFICER SHEAN: Okay, so is it

that the plume, itself, is not within 100 feet of the occupied structure? Or that, because if I'm understanding it correctly, along a linear facility 200 feet from the centerline is the point at which no activity is permitted, right?

I'm just trying to reconcile this so I understand it, what it means. This is now an occupied structure that is outside of the control of the applicant, such as a residence?

MR. WALTERS: Right. Essentially what this does is if the linear essentially is going right through somebody's front yard or, you know, closer than 200 feet, --

HEARING OFFICER SHEAN: Okay.

MR. WALTERS: -- we want to make sure that we are not, you know, grossly impacting these structures that are outside of the control of the applicant.

So we want to make sure that they're providing adequate dust control in those situations.

HEARING OFFICER SHEAN: Right. I understand that now.

MR. WALTERS: And in this particular case I think there are limited situations of those

kind, considering the fact that the linears are going to go by only a few occupied structures.

HEARING OFFICER SHEAN: Okay. Thank you.

COMMISSIONER PERNELL: Can I do a quick followup?

HEARING OFFICER SHEAN: Sure.

COMMISSIONER PERNELL: As I understand it from the site visit there are agricultural fields that will be close to the structure. Maybe the applicant can help me on this. Are there agricultural fields out there?

MR. CARROLL: Yes, there are.

COMMISSIONER PERNELL: So then the one-person plastic facility that Mr. Shean was talking about, would that apply?

MR. WALTERS: I don't think that we would consider a Port-A-Potty a permanent structure. We could always put the word permanent in --

COMMISSIONER PERNELL: Did you say --

MR. KRAMER: You weren't supposed to say the word.

COMMISSIONER PERNELL: -- is it permanent? Is the word permanent in your --

MR. WALTERS: No, but if the condition were, you know, would like to add that particular word we could do that.

COMMISSIONER PERNELL: That would be fine with me. I just want to cover, we don't want to eliminate any ongoing activity in the area. Or stop the project because of ongoing activity in the area.

HEARING OFFICER SHEAN: All right.

MR. TOMASHEFSKY: Garret, I --

HEARING OFFICER SHEAN: Yeah.

MR. TOMASHEFSKY: -- have a question. This question is for Mr. Neil. Back on page 12 of your testimony, the second-to-last paragraph just above section G.

You make a comment about the Imperial County Air Pollution Control District and the applicant taking a proactive stance offsetting completely H2S commissioning emissions.

Can you elaborate on that, or is there any document that you can refer the Committee to on what actually has been done?

MR. NEIL: It's in the final staff assessment. That the emissions of the commissioning for both H2S and for particulate are

being offset.

I can get a copy and show where in the final staff report it's listed if you'd like.

MR. TOMASHEFSKY: If you can that would be great. All right, thank you.

MR. CARROLL: If I could just clarify, I think the characterization of that activity as being proactive was based on the fact that the applicable regulations would not require that either PM10 or H2S be offset. And the applicant voluntarily agreed to provide those offsets as mitigation for the project.

MR. TOMASHEFSKY: Thank you.

HEARING OFFICER SHEAN: All right, if there's nothing further on air quality matters we're going to move now to our biology matter. And ask the staff to -- first of all, does anybody need a break?

UNIDENTIFIED SPEAKER: (inaudible).

HEARING OFFICER SHEAN: Yes?

(Laughter.)

UNIDENTIFIED SPEAKER: Can the public health witness be excused?

HEARING OFFICER SHEAN: Yes.

UNIDENTIFIED SPEAKER: Thank you.

MR. TYLER: Hi, this is Rick Tyler. I came on the line, I've been listening for awhile.

HEARING OFFICER SHEAN: Thank you. Are you going to stay on?

MR. TYLER: Yeah. Do you have questions of me for hazmat or fire protection?

HEARING OFFICER SHEAN: Yes.

MR. TYLER: Okay, should I just wait on the line then through the break?

HEARING OFFICER SHEAN: I think so. We're not going to -- it's not going to be very long.

MR. TYLER: Okay.

PRESIDING MEMBER KEESE: Let me --

MR. TYLER: I'll be here.

PRESIDING MEMBER KEESE: This is Bill Keese. Let me first tell you what our situation is. We were delayed in leaving Sacramento for a couple hours because of the aircraft problems involved in L.A., Ontario and San Diego.

We were delayed after we got to San Diego with the closure of Interstate 8. We had to backtrack and go down I believe it's 94 towards the Mexican border and back into 8.

At this time it's not certain that we're

going to be able to fly out of San Diego today. People were renting cars to drive to Sacramento from San Diego as we were departing the San Diego Airport.

So there's a number of people who are going to try to find alternative sites to move north tonight. So, I would suggest that we skip the break and continue moving forward. We do want to hear from everybody. I'll ask you to be, when we get to those parts let's all up here and in the audience please be as brief in making our points as we can.

And then perhaps we will find some alternative method of leaving, other than going back through San Diego.

HEARING OFFICER SHEAN: Okay, with that, why don't we have the Commission Staff start with biology, please.

MR. KRAMER: We need to swear Natasha Nelson. And while we're at it, Carol Roberts, as well. She's not actually a staff witness, but she'll be testifying.

You're on the phone, Carol?

MS. NELSON: She asked to take a break.

MR. KRAMER: Carol may have taken a

break.

MS. NELSON: She was sworn in --

MR. KRAMER: That's right, Carol has already been sworn in.

(Parties speaking simultaneously.)

Whereupon,

NATASHA NELSON

was called as a witness herein, and after first having been duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. KRAMER:

Q Can you please state your name for the record.

A Natasha Nelson.

Q And you're the CEC Staff member who prepared the biology section, is that correct?

A Yes, I did.

Q Do you have any corrections to your testimony?

A I noticed just in the addendum, which was prepared, on page 20, the first two lines of Bio14 are new additions. And the underline did not show.

Q Okay.

A That is my only correction.

Q And in their testimony last week the applicant proposed an amendment to -- the week before, to condition Bio19, correct?

A Yes, I did see that.

Q Do you agree to make that correction?

A I would only agree if my correction was inserted.

Q Okay, so --

A So I think you'd have to ask the applicant's biologist to agree to that.

Q Okay.

MR. KRAMER: So that then it may be helpful for us to have a five-minute sidebar at some point then to discuss that. But we'll move on through the testimony first.

HEARING OFFICER SHEAN: Maybe just for the purpose of clarification, can you indicate is your Bio19 now shown on pages 24 and 25 of the staff addendum?

MS. NELSON: Yes, it is. And there are no changes between our two versions of Bio19 besides the last line, a credentialed biologist -- last line of the first paragraph. And then what you see in underline on page 23 of CE Obsidian's

written testimony, I believe October 17th.

So I'll probably accept all of the applicant's Bio19 with one small revision to replace the one you see in mine.

HEARING OFFICER SHEAN: In that case, if you and they work this out, are we done with the topic or --

MR. CARROLL: Yeah, I have to apologize. I'm not sure that I'm following it at all. Maybe Mr. Kramer's proposal for a five-minute sidebar would be the most efficient.

HEARING OFFICER SHEAN: Yeah, let's give you that, because I think we can do probably away with the topic if you're in agreement.

MR. KRAMER: Well, we will still have the -- at least we need to highlight and speak to Carol Roberts about the biological opinion, which we didn't get last week as we had last told you we were expecting it. So we will have a little bit of discussion.

HEARING OFFICER SHEAN: But that's a status update, right?

MR. KRAMER: I need to ask her a couple questions because we want to make sure, at least staff would like to see that our conditions are

consistent with her opinion. And frankly, we haven't had time to talk to her since the last conversation I understand she had with the applicant.

And I need to ask her a couple questions. It won't take a long time.

HEARING OFFICER SHEAN: Well, we're going to stop talking. You guys do the language. We will be back here by that clock showing quarter past the hour. And hope to get underway.

(Brief recess.)

HEARING OFFICER SHEAN: We have a representative from the County who is, of course, very busy with everything that's going on, who would like to make some comments before we resume our biology. So, welcome.

EXECUTIVE OFFICER BURNS: Thank you. I'm Robertta Burns, the County Executive Officer. And CalEnergy has been in business in Imperial County for quite a bit of time. They are currently the largest property tax payer in Imperial County.

The geothermal industry is really a very large part of our economy here, and represents a fair amount of the value that we have in the

property tax base.

Now, of course, in addition to property tax they also pay sales tax and create jobs. And it's anticipated that this will create about I believe it's 70 jobs. And the construction will entail at least 500 construction workers in order to construct this plant.

The other advantages to this plant is it will help to stabilize the energy availability, and make less reliance locally on bringing in energy from other sources, particularly out of state.

So we would ask that one of the things you look at is the ability of this plant to support the local economy, to support the local communities and to support the energy that's needed in this area to continue to grow.

So, you know, I don't know if there's any questions I can answer in relation to that, but I would be glad to do that.

HEARING OFFICER SHEAN: I don't think so, but thank you for taking your time out under important and extraordinary circumstances to come visit us today.

EXECUTIVE OFFICER BURNS: Well, thank

you; I appreciate your willingness to move me ahead and listen to me.

HEARING OFFICER SHEAN: Thank you. Did we have another speaker? Yes, sir, quickly, please.

MR. LEMMON: Hi, I'm Tom Lemmon; I'm the President of the Imperial Valley Building and Construction Trades. And I just wanted to go on record that we are fully supportive of this project, obviously, with 1.4 million construction jobs that will provide for local building tradesmen.

So that was all I wanted to say.

HEARING OFFICER SHEAN: Mr. Lemmon, we appreciate that very much, thank you for coming.

MR. LEMMON: Thank you.

COMMISSIONER PERNELL: Thank you.

PRESIDING MEMBER KEESE: Thank you for the brevity.

HEARING OFFICER SHEAN: All right.

MR. NORTON: I'd like to make a quick comment. My name is John Norton. I am an unemployed electrician and I live up in the north end in Nyland.

And as you know we have about 22, 25

percent unemployment here. And a lot of, how should I say, ignorance, not stupidity. People we really don't want from the state a fish. What we want to do is we want to learn how to fish. Which meaning we need jobs, we need skills.

CalEnergy wants to come in and build this plant which will be bringing in some people, which will give the locals a chance to work, to pick up skills and to learn how to work themselves, as opposed to the welfare and unemployment and chronic drug dealing.

And I just want to go on record saying that we need this plant. We need the jobs. We need the skills. We need all this so that this valley can come out of being the poorest valley in the state, and maybe get on par with the others.

And that's really all I have to tell you.

HEARING OFFICER SHEAN: Mr. Norton, thank you.

PRESIDING MEMBER KEESE: Thank you.

MS. SCHONEMAN: Good afternoon. Ayron Schoneman with COLAB, the Coalition of Labor, Agriculture and Business for the Imperial County, 1430 Broadway, El Centro.

I'm just here to voice our enthusiastic support for this project that CalEnergy has put forth. We look forward to the additional jobs locally, as well as the jobs that will be provided through the construction of the plant.

COLAB, I represent 200 local businesses in the areas of labor and agricultural interests, as well as construction and some other business types like that. And across the board we just see the positive benefit of this plant going in locally.

So we would appreciate your support, as well. Thank you.

PRESIDING MEMBER KEESE: Thank you.

HEARING OFFICER SHEAN: Thank you. People who have spoken, if you have business cards or can otherwise identify yourself for our reporter that would be a big help.

All right, I think we're ready to jump back into the fray here with biology and Ms. Nelson and the staff.

DIRECT EXAMINATION

BY MR. KRAMER:

Q Ms. Nelson can describe the agreement we've come to on Bio19 for the record.

A Yes. Bio19, as presented in the October 17th testimony of CE Obsidian, would be accepted by staff in complete replacement of my own, with the following edits:

The second paragraph, sixth line, "If habitat is made unsuitable, e.g. the evicted" you would add the adverb "evicted owls leave the area 6.5 acres of habitat per pair would be provided."

On the top of page 24, first paragraph, based on the number of burrowing owls identified as potentially, again just modifying that slightly, "potentially impacted the project owner shall identify the amount of land it intends to protect 15 days prior to construction."

So with those two words the applicant was in agreement, would clarify the measure, and would replace mine.

HEARING OFFICER SHEAN: Excellent. Thank you.

MR. KRAMER: Now that, I believe, is all the outstanding issues. Mr. Carroll, correct me if I'm wrong?

MR. CARROLL: That is correct.

MR. KRAMER: And that brings us to the question of the biological opinion, which staff

has not yet seen. The applicant may have seen a draft via the federal parties, but I'd like Ms. Nelson to describe one situation that she's aware of where our current condition may be inconsistent with what she has heard is likely to be in the biological opinion.

MS. NELSON: Right. I was told from Carol Roberts at the U.S. Fish and Wildlife Service that she was accepting the conditions that were published in the biological assessment which CE Obsidian prepared July 11, 2002.

In there is a concern with construction noise abatement. And in the biological assessment it says construction activities that exceed 60 dba standard would not occur during the breeding season March through July.

In my supplemental testimony, I guess I'm sorry it was called an addendum, on page 22, is condition of certification that staff is recommending, Bio16. In there we use different dates; we use March 1st to May 31st, in opposition to March through July. And we would also allow the 60 dba threshold to be exceeded during the daylight hours.

So while the applicant would be in

compliance with our condition of certification, they may be in violation of the biological opinion. And we'd like a chance to review the biological opinion and make our condition of certification consistent with that, because the federal U.S. Fish and Wildlife Service has more precedence in this matter.

HEARING OFFICER SHEAN: Okay, why don't we do it this way. We will have a period where we're working on the formulation of the PMPD. If you get information from them that's conclusive as to that, you can let us know that prior to its release.

If you don't get it prior to its release, and it comes out during the 30-day public comment period on the PMPD, since it sounds as if whatever the feds would be doing is somewhat more restrictive than this, then the Committee could incorporate that.

And because it would be somewhat more restrictive instead of essentially loosening, we generally don't consider that to be a revision of the PMPD. And we could then incorporate that and ultimately that would be available to the full Commission for its consideration and possible

adoption at a full Commission hearing.

Does that sound acceptable to you?

MS. NELSON: Yes, I think that's sound.

HEARING OFFICER SHEAN: Okay. And to the applicant?

MR. CARROLL: That's a very good solution.

HEARING OFFICER SHEAN: All right.

MR. KRAMER: And we have one more question issue we wanted to address with Carol Roberts.

Whereupon,

CAROL ROBERTS

was called as a witness herein, and having been previously duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. KRAMER:

Q Carol, can you hear me?

A I can hear you.

Q Conditions Bio14 and Bio15, we interpret to, at least in theory, allow the applicant to begin construction prior to making a protocol survey for some of the species. In essence they could start constructing and when the protocol

survey window, the timeframe in which you can make that, came upon us, they would cease their construction efforts, conduct the survey and then begin again.

Natasha has related to me several conversations she's had with you. And we were not sure if that was acceptable to you or not, because it's a rather fundamental aspect of the project. And your needs and requirements, we wanted to clarify that with you on the record. Whether you were comfortable with our current formulation of Bio14 and Bio15.

A Unfortunately you were breaking up through that. The concern with not providing, or not having completed the protocol surveys prior to the start of activities is it's been difficult to evaluate the amount or extent of take that has occurred as a result of the project.

Q Does that mean you'd rather not see it happen, or --

A I'd rather not see it happen if at all possible. The protocol survey window is March 15th to May 31st that we will have an opportunity for surveys to, unless construction is planned much earlier than I understand, we'll certainly be

at least some window of opportunity before construction would begin.

MS. NELSON: Were you able to hear it was March 15th, the window --

COMMISSIONER PERNELL: And what was the last date? March 15th through?

BY MR. KRAMER:

Q Carol, what were the dates again of the window?

A March 15th through May 31st.

COMMISSIONER PERNELL: So that's a 90-day period possibly?

BY MR. KRAMER:

Q But they could, if they began on March 15th, they could complete the survey before the end of the period and then theoretically begin constructing, right?

A Provided, you know, the construction activities that are occurring are with all of the terms and conditions.

Q Let me ask you, is the biological opinion going to address this question?

A Not specifically. It can. It was not something that I had planned to incorporate specifically. But it can if that would be of

assistance.

MR. KRAMER: Well, I mean just as easily for us to get it right in our conditions, but we just -- what we don't want to create is a situation where we pretend that the applicant can go forward and you get very upset and perhaps legalistic and enforce some kind of sanction upon them. We're not trying to set them up.

So, we need to know what the Service feels would be the appropriate provisions in 14 and 15.

MS. NELSON: And it could be just for certain locations or certain activities, that's the most important part.

MR. CARROLL: If I could suggest, this sounds like a secondary where we need clarification at the Fish and Wildlife Service level on something that they may be thinking about being more stringent regarding than the staff. It seems to fall into the same category as the issue we just discussed.

HEARING OFFICER SHEAN: It seems like it does. Now, let me just indicate if --

(Telephone dial tone.)

HEARING OFFICER SHEAN: Ms. Roberts, can

you hear us at all? Probably not.

COMMISSIONER PERNELL: I think it's gone. Can somebody hang it up?

(Pause.)

MR. KRAMER: Do you want to go off the record for this?

HEARING OFFICER SHEAN: Sure.

(Off the record.)

HEARING OFFICER SHEAN: And just as you got cut off I think what was happening was Mr. Carroll was indicating that he thought, and I think the Committee concurs, is that this matter is somewhat like what we just discussed earlier.

If the feds have more restrictive requirements than the staff has provided with respect to the commencement of construction that that can be developed either prior to the issuance of the Presiding Member's Proposed Decision or during the public comment period, and incorporated.

Let me just indicate, since you said the window for the surveys we understood began on March 15th and ended on May 31st, is that correct?

MS. ROBERTS: That is correct.

HEARING OFFICER SHEAN: Okay. It is

probably possible, just so that everyone has this in mind as you discuss and deliberate it, that the Commission's decision on this could come well before March 15th. So that the applicant, unless there were some other federal permit that delayed construction, that was pending issuance that would be a requirement for construction, at least as far as the state side is concerned, assuming and based upon the state of the record as we've seen it, that there are no project stoppers, the Commission certification would be occurring well prior to March 15th, which is the beginning, if I understand correctly, of the window of opportunity for these surveys.

So that's just a fact that I think you all ought to take into account as you discuss this matter further.

Now I'm through.

MR. KRAMER: We're certainly willing, at the staff level, to wait to receive the biological opinion and then report to the Committee any changes we feel are necessary to conform the two.

And in the meantime we can be discussing them further with Ms. Roberts and the applicant what Bio14 and 15 mean, what they should mean.

HEARING OFFICER SHEAN: Sure, and I'm quite certain the applicant is in consultation with the Fish and Wildlife Service in terms of the materials that relate to the biological opinion so that their views are being expressed. And any concerns that they have about the commencement of construction are also being expressed to the Fish and Wildlife Service.

So I think we've got everybody on topic and we'll just wait and see what happens.

Does that seem satisfactory to you, Ms. Roberts?

MS. ROBERTS: You know, I'm sorry, I didn't hear most of that. All I can hear is paper crinkling.

HEARING OFFICER SHEAN: Well, why don't we do this. When we conclude this meeting, if we can just ask Ms. Nelson or another representative of the staff to communicate with you by telephone what we've basically indicated.

And let me just say -- can you hear me now?

MS. ROBERTS: A little better.

HEARING OFFICER SHEAN: Okay, I can go up a couple of decibels if you need that. The

Commission could certify this project substantially earlier than March. So it seems to us that you and the applicant and the staff ought to be talking about what provisions in your biological opinion should be incorporated in the Commission's decision to insure that your concerns are met.

And we'll let you and the applicant and the staff just deal with this and inform the Commission prior to -- let me say, during the public comment period on the proposed decision, of what solutions you arrive at.

Is that satisfactory to you?

MS. ROBERTS: That sounds fine.

HEARING OFFICER SHEAN: All right. Anything --

MR. KRAMER: That's all we have.

HEARING OFFICER SHEAN: Okay. So that's a wrap on biology then and our federal biological opinion status. All right, thank you. And thank you, Ms. Nelson, we know you had a long trip down and a long windy ride. I don't know that you got your money's worth up there at the podium.

MR. CARROLL: Just one procedural issue. Would you like us to move the admission of the

exhibits, or did they go in when I wasn't --

HEARING OFFICER SHEAN: I would have thought that in the initial presentation that all the biology, and in fact the air quality matter, would have essentially been captured in that.

If you feel that for some reason what you can offer maybe did not include that --

MR. CARROLL: No. What we offered in the prepared testimony captured all of the exhibits.

HEARING OFFICER SHEAN: All right.

MR. KRAMER: As did we.

HEARING OFFICER SHEAN: Yes. My belief now is the entirety of the record is in, as well as the FDOC and the letter from the District, the October, so that there really is nothing out there that we have not captured in the evidentiary record?

Okay, all the lawyers seem to be nodding yes. And we'll just take that as a sign that we think we've got it.

MR. CARROLL: Agreed from the applicant's perspective.

HEARING OFFICER SHEAN: Okay. All right.

MR. KRAMER: May I ask a housekeeping matter?

HEARING OFFICER SHEAN: Yes.

MR. KRAMER: Could Mr. Walters be excused, or would you prefer that he remain for the public comment?

HEARING OFFICER SHEAN: It's probably not necessary that he really -- I don't think so.

MR. KRAMER: Okay, thank you.

HEARING OFFICER SHEAN: Thank you very much. And, Ms. Nelson, if you had a ride other than with us you could leave, too, but we're all stuck here in El Centro until we figure out how we're going to get out of here.

All right, the next item that we had is the Committee question with regard to fire safety, hazardous materials and environmental justice.

Let me indicate for the record that at the prehearing conference that we held a little while back Mr. Garcia, who is the Advisor to Commissioner Pernell, had some matters that he wanted to raise and discuss. And we have reduced those to writing which was sent out on October 17th. And we have received back from both the applicant and the Commission Staff some written

responses with respect to those.

Just in the interests of saving time here, not only do we have those responses -- oh, I guess we may not have included your responses in your testimonial offering, so is there objection to admission of the responses of Commission Staff to the Committee questions?

MR. CARROLL: No objection.

HEARING OFFICER SHEAN: Okay. It's in. Now we have a complete record.

So, why don't we do this in the interests of time, if Mr. Garcia has any further questions or wants some further explanation of any of the answers that were provided, we'll do it that way.

MR. GARCIA: Okay, yeah. I want to thank both the staff and the applicant for their answers. I do have some further follow-on questions, mostly for the applicant. And I've reduced my original bunch of questions to basically three smaller areas.

And the first one has to do with hazardous materials compatibility. And neither the staff nor the applicant was responsive in the area that I was interested in.

Specifically I was concerned, I am concerned about the compatibility of ammonia and chlorine, diesel and sulfuric acid and I can't recall if the inventory has sodium hydroxide or -- caustic solution and sulfuric acid.

And a lot of power plants have had problems in this area where spilled materials ends up getting commingled, and winds up having a problem on their hands.

And I want to make sure that the applicant has addressed this in their design and if they could speak to that, please.

MR. RAEMY: We can speak to that.

HEARING OFFICER SHEAN: I think the probably better thing for him to be is sworn. Why don't you do them both.

MR. CARROLL: We will have both Mr. Raemy and Mr. Salamy, who submitted the responses to the questions, sworn.

Whereupon,

JERRY SALAMY and BERNARD RAEMY

was called as a witness herein, and after first having been duly sworn, was examined and testified as follows:

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DIRECT TESTIMONY

MR. RAEMY: The way we addressed the question in our response submitted last Friday was by referring to a general arrangement of the power plant where we identify storage locations for various chemical components that are utilized during the process.

In particular, hydrochloric acid tank, which is located in an area, you know, that's separate from any other storage of chemical component, which is in the northwestern part of the power plant.

In addition, we discuss also storage area for materials that are used in conjunction with the cooling tower, which are located in the southeastern part of the power plant.

So those two storage locations are significantly apart from each other. And each storage location is also surrounded by a curb which allows containment of any spill, as well as a buffer in case of spill combined with a 100-year storm.

MR. GARCIA: Okay. That still isn't responsive to my question, Mr. Raemy. I want to know if they spill caustic or sulfuric acid, or

both, are they going to come in contact because the containment area is a common area.

MR. RAEMY: The answer is no. There is hydrochloric acid that's stored in one location. So what will spill from the tank will be hydrochloric acid.

MR. GARCIA: And could it come in contact with sulfuric -- I mean with a caustic?

MR. RAEMY: Not to my knowledge.

MR. GARCIA: Okay. What about the next pair, diesel and sulfuric acid?

MR. RAEMY: Not to my knowledge, either.

MR. GARCIA: Okay. And ammonium containing products and chlorine, or sodium hypochlorite?

MR. RAEMY: No. Again, the chemicals that are utilized for the cooling tower are not going to mix with -- are also in a discrete location, all by themselves.

MR. GARCIA: Okay, so you're telling me that if we spill 100 gallons of liquid -- or aqua ammonia and there's no way that they're going to come in contact with sodium hypochlorite solution?

MR. SALAMY: This is Jerry Salamy with CH2M HILL. And I think the issue we're trying to

drive at here is this is not like a standard combined cycle project where you would have a water treatment building where most of the chemicals would be stored.

In this particular facility real estate is relatively inexpensive. The project design allows for a more spread out project site. And it makes most sense, from an engineering standpoint, to store the materials where they're going to be used.

And in this case those materials that are used for the brine handling system are stored together. Those materials that are incompatible in that process would be physically separated from one another such that if there were a spill, an acid spill would not go into the containment structure that contains the base because of the reactions involved.

So I think that's what we're trying to say in terms of --

MR. GARCIA: That's what I wanted to get at.

MR. SALAMY: Okay.

MR. GARCIA: Okay.

MR. SALAMY: That is what we tried to

say in probably more words than you really wanted.

MR. GARCIA: Okay. I have two more areas but I think we can run through quickly. One is the hydrochloric acid. As I recall in the AFC, table 15 or something like that, you indicated that the facility would hold something like it's either 15,000 or 30,000 gallons of 32 percent hydrochloric acid, is that correct?

MR. SALAMY: That is correct.

MR. GARCIA: Okay, and as I recall, the Cal-ARB program threshold concentration for hydrochloric acid is 34 or 35 percent, something like that?

MR. SALAMY: It's actually 37.

MR. GARCIA: 37 percent, okay. So in your logic you did not prepare an RMPP plan pursuant because it does not exceed the concentration, is that correct?

MR. SALAMY: The concentration that we're proposed to use would not require an RMPP, yes, that is correct.

MR. GARCIA: However, if we look at the 30,000 gallons and we apply the concentration factor to that, we're looking at roughly 10,000 gallons of -- hydrochloric acid, is that right?

MR. SALAMY: That's correct, yes.

MR. GARCIA: Okay. What is the reason that from a risk management point of view that these plans are often -- not often, these plans are prepared?

MR. SALAMY: The plans are typically prepared because there's a potential of an off-site impact as a result of an accidental release. Typically when the EPA and the ARB and other agencies promulgate regulations they look at the toxicity of a material, and the potential for it to get off site, and what the impacts would be.

In the case of acids they typically look at acids from the standpoint of what's currently used in the industry, the concentration and its ability to migrate off site.

I think you pointed out a 32 percent solution is mainly water with a little bit of hydrochloric acid in it. The potential for it to migrate offsite is probably more associated with it literally flowing offsite.

I believe the facility is going to be designed with adequate stormwater management and also secondary containment on chemical storage areas that would preclude it migrating offsite

that way.

The other potential area would be if it were to volatilize, if it were some type of gaseous species, like anhydrous ammonia that you have a liquid spill, it volatilized to the air; it then migrates offsite.

That 's not the case with 32 percent hydrochloric acid.

MR. GARCIA: And can you tell us for the record what the containment material is? Is it a steel tank, a plastic tank, foam tank, whatever?

MR. SALAMY: I believe it was a plastic tank that was specified.

MR. GARCIA: Okay.

MR. SALAMY: Now that's the tank. There is also a secondary containment that would like be some type of coated concrete.

MR. GARCIA: Okay, all right. Thank you very much on that.

Now, my last item has to do with the elemental sulfur that's produced in I believe the abatement system. We're looking at something like 2.5 tons of materials that are produced on a daily basis. And as I recall, I think it was in the AFC, the applicant indicated that they would be

looking at the possibility of recycling the material.

My specific question had to do with actually two areas. One, how would you go about recycling it? And the other part has to do with the economics of recycling. Why don't we start with the economics first. Basically there is a cost to disposing of this material, and that's one number that I'd like to get on the record.

The second is that given that there is a feasible method of recycling this elemental sulfur, what is the cost, or perhaps even a revenue stream to the project, of doing so?

MR. RAEMY: I think for the specific answer regarding the cost of disposal, if I could I'd like to be able to take maybe a minute and get that information for you. I think we can get that today and come back to you on that immediately.

HEARING OFFICER SHEAN: Pardon me?

(Pause.)

MR. GARCIA: Mr. Raemy, we'll come back to your answer. That will be the end of my questions.

HEARING OFFICER SHEAN: Okay, so what we'll do is just divert here, do a little bit of

other business, and then come back to that.

Just as a housekeeping matter, let me also indicate that the Committee had at its desk here when we came in a letter from Mr. Bill Powers, the Chair of the Border Power Plant Working Group. And attached to it is a document entitled, Evidentiary Hearing Comment Letter, in which Mr. Powers comments about the recharge of the geothermal field and issues related to the use of cooling water from the geothermal field, and the issues related therefore to recharge.

In it he makes a reference to a portion of the staff's FSA, and I'm trying to find that. Has the staff read the comment letter and understand it?

MR. WORL: We just --

MR. KRAMER: -- somewhat. What I read in this is he doesn't think we've shown that the resource is going to be unaffected by this withdraw, and it may be depleted gradually over time. And that we haven't shown for sure that it won't.

I'd point out that the Committee early on in this case made a finding that there's a resource available in commercial quantities for

the life, the 30-year life of the project. That's what's required under our rules.

I don't know if he's trying to make this into a CEQA impact. Obviously, I mean the Border Power Working Group is an intervenor. They received the order. And if this was to be made a full blow issue to be litigated, they were supposed to have raised that in a prehearing conference statement.

HEARING OFFICER SHEAN: No, and we understand that. And I think by the fact that he's raising it as a comment letter -- I have found his reference which is on your AFC page 4, 4.9-6, in the last paragraph. It says that annual recharge is about 400,000 acrefeet from various sources. And it cites an ICPBD 1993.

Is that specified at the end of your chapter here? If it's not, maybe what I'm suggesting is that you give the record the benefit of that reference and serve it upon all parties. And we'll put it in the record so that we have notion of what that is.

Okay, is that the Imperial County Planning and Building Department?

MR. WORL: Yes.

HEARING OFFICER SHEAN: Okay, the Imperial County General Plan. Okay. And that reference is on 4.9-37.

Why don't you docket that so we can take a look at it and see if we can evaluate that more fully, Mr. Powers' comment. You know, as we do, we take all the materials that we get seriously, so I'd like to take a look at that, if you have the document, itself.

MR. WORL: We have it.

HEARING OFFICER SHEAN: Okay.

MR. KRAMER: It might be rather large. If we could docket the relevant portions that might be --

HEARING OFFICER SHEAN: Yes.

MR. KRAMER: -- a friend to the forest.

HEARING OFFICER SHEAN: That would be great.

COMMISSIONER PERNELL: Okay.

HEARING OFFICER SHEAN: Okay, now we're back to -- do we have the information --

MR. CARROLL: Yes, we do have the response for Mr. Garcia.

HEARING OFFICER SHEAN: Okay.

MR. RAEMY: The numbers we'd like to

provide for the record will be $7 per ton for disposal and $13.50 per ton for transport. Sorry, $77 per ton for disposal and $13.50 per ton for transport.

MR. GARCIA: Okay, so that -- let me repeat that and make sure I understand. The tipping fee for the disposal is 77 bucks? And on top of that there's a transportation fee of $13.50, for a total of $90.50 per ton, is that right?

MR. RAEMY: That's correct.

MR. GARCIA: And that's the disposal cost.

MR. RAEMY: So, if you look at 2.5 ton per day it will be at $90.50 per ton; 2.5 tons per day you would be looking at $226 per day, which is $82,580 per year.

MR. GARCIA: Okay. And the recycling costs?

MR. RAEMY: Well, it depends. In case if we can recycle this byproduct it's likely that we would have local farmers picking up the product from our facility --

MR. GARCIA: But, the heart of the question that the Committee asked was the two

costs. And one without the other doesn't help us very much.

MR. RAEMY: To get at least an envelope around this question, you can assume that the cost of disposal that we would have with this 2.5 ton per day, which would amount to about $82,000 per year, would be avoided if the byproduct would be suitable for pickup by local farmers, and they would be able to just pick it up for us.

We would not have to transport it to an appropriate landfill and would not have to pay the disposal costs or the disposal fee that's associated with its disposal.

MR. GARCIA: So then I'm going to ask the obvious question, why are you proposing to dispose it to a landfill and use up valuable landfill space when the alternative is for land application as a soil improvement at a lower cost.

MR. RAEMY: That's a very good question, in the sense that, you know, it's not our intent to dispose of it. What we are trying to propose or to show is a worst case scenario where we would have to dispose of it. But our preference would be to be able to use it as a byproduct.

Our preference would be able to find the

solution with the appropriate parties to be able to use this byproduct for something more productive.

MR. GARCIA: Okay, so now that we've established the two extremes, let me ask you, let's say that on the one hand it costs you 90 bucks a ton, and on the other hand maybe you can make 5 bucks a ton by giving it or selling it to the farmers.

Is it, within this range, the possibility that you could pay the farmers to take it, say $25 a ton, or some other number? So, you're not precluding that?

MR. RAEMY: We're not precluding that. Assuming that we can provide some value to a third party with this product, we'd probably be looking at the value that's added to the third party and identify, you know, the parameters of the transaction.

So at this stage I don't know what the number would be, but I can say that under the assumption that we would dispose of this byproduct at no cost to the third party, we'd be avoiding the $90 per day that would otherwise occur.

MR. GARCIA: Okay, I'm fine. Thank you.

MR. RAEMY: Thank you.

HEARING OFFICER SHEAN: Okay, I just have a question here for Mr. Carroll. I think it's for you, or maybe for one of your people here.

And this is staff's addendum, page 38. It's the condition Com8. With respect to the construction and the operation security plan, I guess I'm focused on the construction security plan since it needs to come first, item number 4.

Do you understand and/or are you comfortable with the use of the word suspicious activity? Is that sufficiently clear in your mind, or is it vague in your mind as to what it is that either is expected or the kind of thing that you people would be responding to?

MR. CARROLL: I would confess that there is a certain vagueness about the word suspicious, but I think that we have a general understanding of what it is that the staff is trying to convey.

HEARING OFFICER SHEAN: Okay. And with respect to that, does the staff have either prior construction security plans, or a model plan that helps define for them what it is that constitutes a suspicious activity?

I understand you're not a law enforcement, and you don't have to show probable cause, but it would help if we know what's suspicious and what's not.

MR. KRAMER: Well, I presume that -- well, some of these plans are treated as confidential for security reasons. But I'm pretty sure this isn't the first time the compliance staff has wrestled with this.

I think the point here is that the protocol will probably define or can define this more precisely if that's necessary. It's something that the applicant and the compliance staff would negotiate as the plan is submitted for review and then approved.

HEARING OFFICER SHEAN: Sure. And I think just as much as the Commission is concerned about insuring the security of the facilities, it certifies we are equally concerned as citizens who have sworn to protect the Constitution of the State of California and its citizens, that we're not causing the applicants to contact law enforcement and have them essentially come and talk to a citizen who is doing what is suspicious in one person's mind and not suspicious perhaps in

his own mind. So that we're not over-reaching in the name of security what is otherwise lawful activity.

So I just want to know, and maybe you can help me out from the headquarters building, as to what you mean by suspicious and we'll get to that later.

That's all that I have, other than two things. I would like to thank the applicant for having arranged the use of this facility; and certainly for the provision of all the refreshments for those of us who came in early and had no lunch and no coffee or no nothing. It was great to see this when we arrived. And we thank you very much for that.

Also like to thank our hosts, the Imperial Irrigation District, for allowing us to use the facilities. We've been here before and it's great to be here. And fortunately we didn't have to test your air conditioning as we have on past occasions because it's fairly pleasant out here today. But we want to thank the IID for that.

Is there anything that either the staff or the applicant need to bring to the Committee

before we adjourn this? We will discuss a few procedural matters that we'll handle here after the close of the record in just a second. But making sure if there are any questions or comments that we have them.

Or is there a member of the audience who would like to address the Committee? This is your time to do so.

And if you would, please, as you come forward, just identify for our court reporter your name and if it's a complicated spelling or something, please provide him ultimately with --

MR. GONZALES: Ruben Gonzales, R-u-b-e-n G-o-n-z-a-l-e-s. I'm a resident of Imperial County. I'm here to support this particular applicant. I know for a fact, I've been here in this valley for many years, and geothermal energy, the particular industry has provided wonderful opportunities for local families here.

And I hope that you vote favorably on this particular request. Thank you, sir.

HEARING OFFICER SHEAN: Thank you, sir.

COMMISSIONER PERNELL: Thank you.

MR. McFADDEN: I'm Bill McFadden. You met, I believe, during the summer up in Calipat

and I had a chance to tour this project. This project is going to make a real difference here in Imperial County, and I'm here to support the project.

A 185 megawatt is going to be a real additional source for Imperial Irrigation District. The jobs that it's going to create for the subcontractors is over 550; 70 new jobs will be generated from this.

CalEnergy pays over $3 million taxes right now. And I'm just encouraging your support because due to our high unemployment here in Imperial County, this will make a difference in our growth and expanding our power energy resource.

So I encourage you to support this project. And I wholeheartedly support it on behalf of a lot of the residents that are unemployed. Also the NAACP has a real interest in job creation and in expanding business opportunities and working with subcontractors.

So, on behalf of all of us here in Imperial County, I ask that you please support this project. Thank you.

PRESIDING MEMBER KEESE: Thank you very

much.

HEARING OFFICER SHEAN: Thank you.

COMMISSIONER PERNELL: Thank you.

MR. POPEJOY: Yes, my name's Frank Popejoy, P-o-p-e-j-o-y. And I'm here on behalf of the El Centro Chamber of Commerce and Visitors Bureau. I was fortunate enough to be up in Calipat when you had your other hearing and I've followed this along the way here.

And we strongly support this, not only with job creation, but the renewable energy source, the green energy source that we can tap right here in our own valley to fit our needs. Unlike the source we have across the border, this is clean. And we really need that here. Not only the job creation, but to help balance our energy sources.

So we urge you to support this. Thank you.

HEARING OFFICER SHEAN: Thank you.

COMMISSIONER PERNELL: Thank you.

PRESIDING MEMBER KEESE: Thank you very much.

MS. GILLES: Hello. My name is Nichole Nicholas Gilles, G-i-l-l-e-s. I'm the Executive

Director of the Brawley Chamber of Commerce. And I'm here today representing 350 Chamber members and approximately 7300 employees.

And today I would like to express my support for the request of CE Obsidian Energy, LLC, and their construction of 185 megawatt geothermal power plant near the Salton Sea.

This project is extremely important to Imperial County. As someone said before it's estimated to result in new property taxes equaling $3 million. And Unit 6 will also bring much needed jobs to Imperial County which has the dubious distinction of having the highest unemployment rate in the whole state.

Geothermal renewable power meets the most stringent clean air standards in the United States. It is the most environmentally friendly energy in production, and it's just the type of project that we need here in Imperial County.

And I really hope that you will support this. Thank you very much.

HEARING OFFICER SHEAN: Thank you.

COMMISSIONER PERNELL: Thank you.

PRESIDING MEMBER KEESE: Thank you.

MR. OBERGFELL: Good evening; my name is

Edwin Obergfell, O-b-e-r-g, as in George, f as in Frank, -e-l-l. And I'm here with the Imperial Valley Regional Occupational Program. I'm here to inform the members today of this hearing and the public in general that IVROP, a local educational workforce training organization, fully supports the proposed CalEnergy geothermal power plant construction project to be built near the Salton Sea.

IVROP believes that the construction of this unit will bring enormous and much needed short-term and long-term economic development to Imperial County.

The net results of this new CalEnergy plant will generate millions of dollars, as has been mentioned earlier, of new property taxes, 70 new full-time permanent jobs, hundreds of jobs during construction and clean, renewable, reliable and economic electricity.

In closing thank you very much for allowing IVROP to be here. And we strongly support this project.

HEARING OFFICER SHEAN: Thank you.

PRESIDING MEMBER KEESE: Thank you very much.

COMMISSIONER PERNELL: Thank you.

MR. REYES: Eric Reyes, R-e-y-e-s, Outreach Coordinator for United Farmworkers -- a collaborative between United Farmworkers, Environmental Defense, Latino Issues Forum and Forest Community Research. My main work has been on the water transfer, but the whole deal is to make models for our community that we can draw upon.

And we mainly had to draw upon excellent models of collaboration between environmental interests, labor interests and private investment interests that makes the economy better from outside of the Imperial Valley.

And this will provide an excellent model where the agreement was made in compliance with labor and environmental interests to begin with. And that's a first I think in Imperial Valley, as well. Not to mention the amount of investment coming in here. And with the low per capita income geothermal will provide much better jobs for the people that we are trying to represent and improve our community.

Thank you.

HEARING OFFICER SHEAN: Thank you.

COMMISSIONER PERNELL: Thank you.

PRESIDING MEMBER KEESE: Thank you.

HEARING OFFICER SHEAN: Anybody else? A couple more. We're going to run the gauntlet. We've been told the only place we get out is in San Diego, so we're going to try to run the fire line.

(Laughter.)

MR. HANKS: Good luck. We ran it all summer here.

My name is Jim Hanks. I'm the Superintendent of Calipatria Unified School District. And I stand before you proudly as the largest recipient of this project.

I'd like to add that I'm a native of Imperial County, so I've been around for a long time. And I'd just like to share with you what this means to our District.

In 1995 we passed a bond to completely redo our schools with a bonding capacity increased by about threefold with geothermal, it was a big help. Previously any consideration of revamping our District was just out of the question because the bonding capacity was so low.

I'd just like to add that at the time of

passing this bond the average assessed valuation of the homes in our District was 20,000. That is not a mistake. 20,000. So you can see with the help of geothermal being located in our District we were able to pass a $24 million bond and completely redo our schools. The construction is currently underway. So that's been a big plus for us.

The geothermal represents over 70 percent of our tax base, and is very important to us with the bonds that we continue seeing the prosperity of the geothermal to pay these bonds off.

I'd also like to add that when we passed this bond we met absolutely no resistance from the geothermal industry, which was very encouraging to us.

We also entered into numerous partnerships with geothermal. We have developed because of the technology that we have seen in geothermal we've been able to develop first class technology classes at the high school, which are second to none in the State of California.

We've also been able to provide scholarships to our students. Plus the geothermal

industry has been the major supporter of our locator program, especially our gold medal winning welding classes that consistently, as verified by the audience here, Calipatria consistently wins the gold medal in this area in the State of California.

I'd also like to add that with the addition of this plant it would take us to a basic status which would be a tremendous boost to a community the size of Calipatria, which has had economic prosperity pass it by for a number of years.

On a side note, that the good-paying jobs that are offered at geothermal gives our students a chance to stay here. It is very disheartening over the years, and I've been in the District for several years, to see at homecomings the drain of brain power that we lose out of our community because of the inability to get competitive jobs. To see doctors, lawyers, et cetera, that have to leave our community because of the lack of prosperity here.

In a nutshell I'd like to just make it very plain, that this geothermal is our hope. Without it, I just don't see the town really

continuing to prosper. Twenty years ago if you would have came through Calipat you would have said it was dead on the vine. And we have seen it revive, see it start to show signs of growth. And the main player in all of this has been geothermal. They have been excellent neighbors to us.

Thank you.

PRESIDING MEMBER KEESE: Thank you.

COMMISSIONER PERNELL: Thank you.

HEARING OFFICER SHEAN: Thank you.

MR. COUCHMAN: Sam Couchman, representing the County Office of Employment Training, Work Force Investment Board Member and Veteran Services Director here for the County.

Briefly, we're in support of this project primarily because of the job creation aspect of the project. We have worked closely with CalEnergy in the past to recruit people from the local area for the jobs that they create here in our local area. And we feel that this is an economic boon to our area, especially the north end.

And we're very pleased to support this and work with them in terms of their hiring and

the job creation that it creates and the economic benefit that it brings to Imperial County.

Thank you very much.

COMMISSIONER PERNELL: Thank you.

HEARING OFFICER SHEAN: Thank you.

PRESIDING MEMBER KEESE: Thank you. Let me ask a quick question. Do we have anybody here who's opposed to the project?

(Laughter.)

PRESIDING MEMBER KEESE: I see a -- back there someplace. Okay, anybody else, quickly to tell us that they're in support? Who it is who's in support.

MS. MALLORY: I promise I'll be brief. My name is Anne Mallory; I'm Assistant Superintendent of Imperial County Office of Education. And I'm here tonight representing my boss, County Superintendent John Anderson.

We're here to express our strong support for this very vital project, not only for the economic reasons, as you've heard, but I'm going to speak to the educational piece.

Prior to working for the County Office of Ed I was a superintendent in a school district for about eight years. And during that time, and

since I was at the County, I also see, on a bigger picture level, the amount of support that geothermal provides to education.

And collaboration, as we all know, is key to economic survival, especially in these tough times. And geothermal is there, not only as my esteemed colleague, Mr. Hanks, just explained in the Calipatria District, but I can say firsthand I've seen it in other districts, too. Not only in supporting us by sending practicing scientists and engineers into classrooms, volunteering and donating furniture and resources, both monetarily and in terms of goods to us.

And all those things are essential because we serve some of the most needy children in the State of California here in Imperial County. And so we are very much in support and we thank you for your time in listening to us.

PRESIDING MEMBER KEESE: Thank you.

COMMISSIONER PERNELL: Thank you.

HEARING OFFICER SHEAN: Thank you

MR. KELLEY: Tim Kelley, K-e-l-l-e-y; I'm the Executive Director of the Brawley Economic Development Commission. Our 25 board members and 100 members support this project.

It's one of the most important projects in our County today. It will help to diversify our economy. And with the 80 full-time high-wage jobs it will make a positive improvement to our County.

We have the distinction of being one of the most productive agricultural areas in the world, and with this project and many more in the future, we have the potential of exporting the greatest amount of neutrons that this world has ever seen.

Thank you.

HEARING OFFICER SHEAN: Thank you.

COMMISSIONER PERNELL: Thank you.

PRESIDING MEMBER KEESE: Thank you.

MR. VALENZUELA: My name is George Valenzuela; I'm a resident of Imperial County. A union carpenter for seven years. I just felt the need to come up and say a couple words.

I would have liked if this project would have been union, but if it doesn't, you know, prevailing wage is also real good. I worked here in Imperial County for seven years as a union carpenter. But most of the time I had to drive to San Diego or to L.A. for work, because, you know,

there's not many union jobs around.

So it would be a good thing, you know, for the union carpenters here if it was union so they won't have to drive so far.

Thank you.

PRESIDING MEMBER KEESE: Thank you.

HEARING OFFICER SHEAN: Thank you.

COMMISSIONER PERNELL: Thank you.

PRESIDING MEMBER KEESE: Is that it? Well, -- no? Quickly.

(Laughter.)

COMMISSIONER PERNELL: You can't get away that fast.

MR. GROGAN: By god, I been in this business about 30 years. Quick is not a terminology that I have used in the development of geothermal.

Gentlemen, in 1975 we began the studies down here by the University of Riverside looking at the development of geothermal and the development of a geothermal element to our general plan.

The Salton --

COMMISSIONER PERNELL: Could you state your name -- sorry --

MR. GROGAN: Larry Grogan, the City of El Centro.

We estimated the reserve somewhere between 3000 and 5000 megawatts of power for the Salton Sea. If you look at the environmental studies I believe that would be confirmed.

You know this probably is the greatest unfulfilled potential in California. In the time that CalEnergy has announced this power plant, two power plants have been built south of the border using air polluting hydrocarbon base.

Mr. Signorotti asked that I be gentle in my comments. But the ISO has announced last week that there was probably going to be a shortfall, possibility of shortage, an energy shortage again next summer. And certainly in '05.

So here we are again looking at the potential of a shortfall, and while this permit is still being processed two power plants have been built south of the border.

All I would ask, gentlemen, is that at some point let's quit permitting the damn thing and start building.

Thank you.

HEARING OFFICER SHEAN: Thank you.

PRESIDING MEMBER KEESE: All right, --

HEARING OFFICER SHEAN: Any additional comments?

PRESIDING MEMBER KEESE: -- seeing none, it's really a pleasure for Commissioner Pernell and myself and our staff to work on projects where we get a uniform support, and where we see collaboration between applicant and staff. It makes our job much easier.

If you read the documentation you'll see that aside from the two items that we've discussed today, on which there was some I won't say dispute, but we hadn't quite resolved coming together, there's another 22, 23, 24 issues that the staff and the applicant worked on diligently, that's been worked on by the public diligently in the workshop process.

So, we come to a final day here and to one who had walked in and just looked at that part they might think we didn't have much work to do. It's a complicated process; I'm really pleased, as I say, to see that it goes smoothly.

Commissioner Pernell.

COMMISSIONER PERNELL: Thank you, Chairman Keese. I would just echo what you said.

And also to add that I want to thank the community for standing up for this project. And as Chairman Keese has said, we don't see that often.

But it's a good feeling to know that we're contemplating a project that will not only be beneficial to the state, but to the Imperial Valley and as well as the applicant.

So, we can't, you know, we like it but we can't make a decision now. We have to look at all of the facts, which is why I'm a little hesitant here.

But again, I want to thank all of the residents for coming out and supporting this. And the staff for having conversations with the community about the jobs and about school and employment and all of those things.

So, with that, and if we can't get a plane, we might have to be staying here. So, --

(Laughter.)

COMMISSIONER PERNELL: -- I'll make mine short. But, again, thank you very much.

HEARING OFFICER SHEAN: Let me just ask the staff and the applicant whether you think a briefing period is needed for this?

MR. CARROLL: We do not believe a

briefing period is needed.

MR. KRAMER: I don't think we need a brief on legal issues. We're just, at some point in the process, as we've discussed, we'll have to report on the biological opinion --

HEARING OFFICER SHEAN: All right, so long as it's reporting. I just wanted to make sure whether we thought we needed a period to do that.

So, at this point let's consider the matter submitted.

MR. KRAMER: One housekeeping issue. I think in most cases we don't consider the executive summary of the FSA to be a part of the FSA as such. But in this case it provides additional evidence to justify override. So I wanted to make sure that that's a part of the record, as well.

HEARING OFFICER SHEAN: If it was a part of your initial offering it's in.

MR. KRAMER: Okay, I --

HEARING OFFICER SHEAN: And I understood it to be because you had expressed that thought before.

All right, so we will consider the

matter submitted. The Committee will then begin its deliberations and formulation of a proposed decision. It will take a little while to get this out. It's a telephone book size document, maybe not quite, but close.

And that will be released for a public comment period. We will notify not only the official parties to the proceeding, but there will be a newspaper notification. If you'd like to get a copy of it we'll have it available either online at the Commission's website, available in a printed form, or also available on a CD ROM disc.

And so, if you would like, please feel free to comment on it.

And the timeline is kind of hard to exactly estimate, because we have a couple of things sort of working in tandem here. But we're going to try to get to it as absolutely quickly as possible.

And so with that, unless there's something further, I'll --

PRESIDING MEMBER KEESE: The van leaves in three minutes.

(Laughter.)

HEARING OFFICER SHEAN: Thank you very

much.

PRESIDING MEMBER KEESE: Thank you.

COMMISSIONER PERNELL: Thank you, again.

(Whereupon, at 5:35 p.m., the hearing was adjourned.)

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CERTIFICATE OF REPORTER

I, JAMES RAMOS, an Electronic Reporter, do hereby certify that I am a disinterested person herein; that I recorded the foregoing California Energy Commission Hearing; that it was thereafter transcribed into typewriting.

I further certify that I am not of counsel or attorney for any of the parties to said hearing, nor in any way interested in outcome of said hearing.

IN WITNESS WHEREOF, I have hereunto set my hand this 5th day of November, 2003.